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Awesome AV!

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Best of Blu Discs to show off your system

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Captain Marvel crashes to earth on Ultra HD Blu-ray, p87

Sony masters 8K
We watch the future of TV with 85in Master Series ZG9

FILM & TV

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- BATMAN 4K ■ ESCAPE ROOM
- US ■ THE RUNNING MAN

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NEXT ISSUE ON SALE: August 8, 2019



Welcome

Are you a Dolby Vision fan or an HDR10+ stalwart? Okay, that's probably quite a niche question, but those with an interest in dynamic metadata HDR formats can rejoice that Philips' 55OLED804 TV (our cover star this issue) supports both.



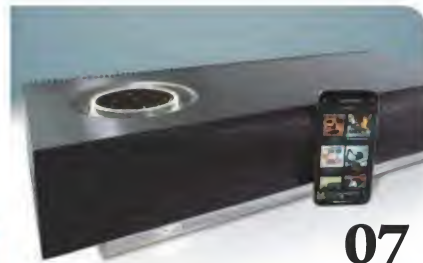
Of course, in an ideal world we wouldn't be in this situation, but when you want to watch the 40th Anniversary Edition of *Alien* (HDR10+) and *2001: A Space Odyssey* (Dolby Vision) at their optimal level, picking a 'side' in this HDR battle is a drag. **The more hardware brands that adopt this all-encompassing approach, the better** – so good news that both Philips and Panasonic have seen the (HDR) light.

Speaking of seeing the light, it's the middle of Summer and I'm considering either moving to Antarctica or installing serious blackout blinds in my living room. I love the near-constant daylight, but it's not conducive to late-night binge-watching...

Mark Craven
Editor



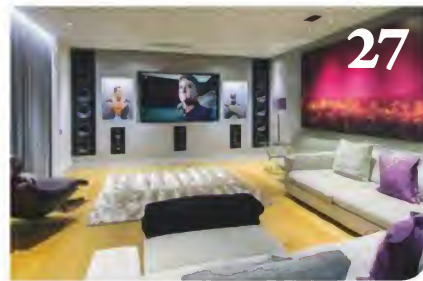
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The experienced TV tester cut his teeth as an early HCC staffer

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BULLETIN

→ **NEWS HIGHLIGHTS** JAMO Home cinema-centric Concert 9 series revamped
LG World's first 8K OLED TV goes on sale **BLACK MIRROR** Netflix series returns... with Miley Cyrus
AT THE PLEX This month's cinema releases **NEWS X10** Hot news stories in bite-sized chunks
SHAZAM! Ultra HD release for ultra-funny superhero flick & MORE!

Mu-so joins HDMI party

Naim Mu-so Second Generation → www.naimaudio.com



For its second-generation Mu-so one-box solution, Naim has introduced an HDMI ARC connection, allowing for integration in a living room TV setup. Other refinements include new mid/bass drivers, a beefed up DSP engine, 'superior' Wi-Fi capability and expanded streaming service/music playback features via Chromecast built-in. The styling retains the look of the original Mu-so, but cabinet size has been slightly increased and there are three new grille options. Add one to your kit rack for £1,300.

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Encore for Jamo

Jamo Concert 9 II → www.henleyaudio.co.uk

Featuring a centre channel, bipole surround and two sizes of bookshelf and floorstander, Jamo's Concert 9 II series is primed for your cinema room. The speakers partner the brand's Hybrid Composition Conical Cone (HCCC) mid/bass drivers with waveguided silk

dome tweeters, in curved cabinets with full-length woven tweed grilles. Pricing begins at £275 for the C 9 CEN II centre and maxes out at £900 per-pair for the three-way C 97 II floorstander. Finish options are Black Ash or a limited edition White Oak.



It's a kind of Magico



Californian brand Magico sells its Ultimate speakers for \$600,000 per-pair, so it can get away with describing its A Series as 'affordable'. Previously limited to the A3 floorstander, the lineup, which acts as the entry-point to Magico's audiophile stable, is growing to include the A1 standmounts (£8,888 per-pair), AAC centre enclosure (£8,000) and ASUB subwoofer (£7,500). All utilise 'aircraft-grade' aluminium enclosures; the passive models feature beryllium tweeters. www.absolutesounds.com

Pure privacy?



Pure is combating consumer fears about unwanted invasion from smart 'assistants' with its debut intelligent speaker. The £230 DiscovR (portable, multiroom-ready) integrates Amazon Alexa functionality (plus Spotify Connect and Apple AirPlay 2), but offers a so-called 'Mic Drop' feature. Keep the speaker in open guise for voice interaction/control, or push down on the top plate to close it, which physically disconnects the onboard microphone. Rechargeable battery life is rated at 15 hours. www.pure.com

LG 8K OLED goes on sale

You'll need to head over to South Korea to buy one first, though

First shown as a prototype at IFA in September last year and then confirmed at January's CES, LG has now begun accepting pre-orders for its 8K OLED TV – but only in its native South Korea.

The company says the 88in 88Z9 model will become available in 'key markets in North America and Europe' by September this year.

UK pricing remains unknown, but the set looks likely to command a premium over rival 8K LED TVs. Early adopters in South Korea need to find 40m won, which equates to around £25,000.

Beyond the bump in resolution, the 88Z9 shares much of the same technology as LG's other (4K) OLEDs, including Dolby Vision and Dolby Atmos support, and HDMI 2.1 connectivity allowing for automatic low latency mode (ALLM), variable refresh rate (VRR) and enhanced audio return channel (eARC). Crucially, those HDMI inputs can also be used to input 8K (7,680 x 4,320) content to match the TV's native resolution. Should you find any...



Brian Kwon: 'The world's first and largest 8K OLED TV shows our commitment to leading the ultra-premium TV segment'

Picture processing comes from LG's second-generation deep learning/AI-toting Alpha 9 chip, in an 8K guise allowing the relevant upscaling of 2K/4K material, and with improved noise reduction (from four steps to six steps) over the 4K iteration.

'Being the first to market with the world's first and largest 8K OLED TV shows our commitment to leading the ultra-premium TV segment and delivering the ultimate viewing experience,' says Brian Kwon, president of the Mobile Communications and Home Entertainment divisions at LG.

Aiming small

Away from 8K, panel supplier LG Display has announced plans to introduce a 48in iteration of its 4K OLED – currently, the smallest available is 55in – which is expected to be sourced by third-party brands as well as LG and sees the tech finding a new entry-level point.

LG has also begun rolling out Amazon Alexa support to its 2019 range of ThinQ (smart) TVs, joining Google Assistant functionality and allowing Alexa voice control/Skills operation without external hardware.

The 88Z9 uses a customised-for-8K Alpha 9 processor



Playlist...

Team HCC spins up its disc picks of the month

Killing Eve: Series Two (BBC iPlayer)

The globe-trotting black comedy spy/assassin thriller returns for another eight-episode run – all available in boxset form on the iPlayer platform.



A Star is Born: Encore Edition (Blu-ray)



Some of the new scenes are great, others less so – but the film's Full HD visuals and Dolby Atmos audio are as sublime as ever.

Chernobyl (Sky Boxsets)



This gripping five-part nuclear disaster dramatisation is simply unmissable – and if you don't have Sky, it hits Blu-ray this month!

Better Call Saul: Season Four (Blu-ray)



'It's all good man.' The *Breaking Bad* prequel just keeps getting better and better.

The Front Runner (R2 DVD)



Hugh Jackman gives one of his best performances to date in this superb true-life political drama.

At the 'plex...

Heading out to see a flick?
Catch these this month

The Dead Don't Die

July 12: Adam Driver, Bill Murray and Tilda Swinton head the cast in indie director Jim Jarmusch's star-studded horror-comedy about a smalltown police force battling a zombie invasion.

The Lion King

July 15: Having already helmed 2016's do-over of *The Jungle Book*, director Jon Favreau is back with this photorealistic CG update of Disney's 1994 animated classic. Donald Glover is on voice duty as Simba, while James Earl Jones reprises the role of Mufasa.

Hobbs & Shaw

August 02: The spirit of *Tango & Cash* lives on in this *Fast & Furious* spin-off that pits Dwayne 'The Rock' Johnson and Jason Statham against Idris Elba's genetically enhanced terrorist... Providing they can hold off from killing each other long enough to save the world.

Xbox has a new resolution

Next-gen console, codenamed Project Scarlett, will usher in 8K gaming

'This is the most immersive console experience ever.' So says Microsoft about the next generation of Xbox, currently codenamed Project Scarlett, and revealed at Los Angeles' E3 gaming expo in June.

The console, which Microsoft has scheduled for arrival in late 2020, will showcase a clear progression from the current top-spec Xbox One X by introducing 8K resolution playback.

While there's no hint yet as to what the machine will look like physically (spoiler: it'll probably be a black box...), Microsoft has confirmed some under-the-bonnet specifications.

'At the heart of our next-generation console is our custom-designed processor, leveraging the latest Zen 2 [CPU] and Navi [graphics] technology from our partners at AMD. From a pure processing perspective, this is four times more powerful than the Xbox One X.'

Adding to the console's premium ethos is the deployment of an SSD (Solid State Drive) rather than the HDD of the current Xbox One S and One X models. This, believes the manufacturer, is a major step forward, leading to an ultra-fast gaming experience. 'One of the things that gamers and developers are most excited about is reducing load times.'

Additional spec boasts are high-bandwidth GDDR6 RAM, variable refresh rates and 'hardware accelerated' ray tracing capability, for photo-realistic lighting effects. Frame-rates too are on the rise, with Microsoft suggesting 120fps delivery will become a reality. '[Project Scarlett] is going to usher in resolution and frame rates that we've never seen before.'



Set to be bundled with the Project Scarlett console when it lands at retailers next winter is the latest *Halo* title, *Halo Infinite*. The first *Halo* game – *Halo: Combat Evolved* – was also chosen as a launch title for the original Xbox in 2001. Microsoft has released a lengthy (over five-minute) trailer showing in-game footage, albeit only in 4K resolution.

Step forward, Sony

Microsoft won't have the high-end console space all to itself, of course. Sony, which gave the E3 conference a swerve this year for the first ever, is due to refresh its PlayStation lineup with a new generation, most likely to be called PS5. This is also expected to surface in 2020, and – according to details teased by Sony Interactive Entertainment President Jim Ryan – will also feature an integrated SSD, 8K output and 120fps support.

Both Sony and Microsoft have also announced they won't be dropping the disc drives from the next-gen consoles, despite the growth in downloads and cloud-based gaming. And it seems unlikely that Sony won't continue to eschew 4K Blu-ray playback in its future hardware.

Epson uses laser to go portable

EF-100 projector promises long lifespan and install flexibility

Projector specialist Epson has unveiled a portable laser PJ designed to fire 150in HD images on to your wall – or even your ceiling.

The EF-100 can be installed flat on a coffee table or shelf for a traditional setup, or positioned vertically with its lens aimed upwards. Back panel inputs (HDMI 2.0, USB) are recessed, with trailing wires able to be fed through a cable groove for stable placement. Vents and power inlet are housed on the PJ's side.

Measuring just 21cm wide and 8cm high, the unit is Epson's smallest ever laser PJ. As with the brand's other models, 3LCD imaging technology is

used, here in conjunction with a light engine claiming 2,000 Lumens brightness and a lifespan of up to 20,000 hours.

'Even in daylight, the laser light source delivers a bright and vibrant picture, so there's no need to turn lights off, block windows or even use a screen,' suggests Epson.

The EF-100 features an onboard speaker, plus Bluetooth output for compatible audio systems. It's available now priced around £1,000, in black/copper and white/silver finishes. www.epson.co.uk

The EF-100 features automated keystone correction (horizontal and vertical) to line up its images



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Discover more: lg.com/uk/lgoled
Model Shown: E8

Press play

Discs spinning your way in the coming month...

July 15

Armstrong (DVD/BD)
Captain Marvel (DVD/BD/3D/4K)
Coming Home (BD)
Gentleman Jack: Series One (DVD)
Of Flesh and Blood: The Cinema of Hirokazu Kore-eda (BD)
The Prodigy (DVD)
Romance (BD)
Sudden Death (DVD/BD)
Years and Years (DVD)

July 22



Alita: Battle Angel (DVD/BD/3D/4K)
Come Back to the 5 and Dime, Jimmy Dean, Jimmy Dean (BD)
The Doors: The Final Cut (DVD/BD/4K)
Hedwig and the Angry Inch (BD)
Jamestown: Season Three (DVD)
Lords of Chaos (DVD/BD)
Sixteen Candles (BD)
Weird Science (BD)

July 29



Asylum: Limited Edition (BD)
Bloody Terror: The Shocking Cinema of Norman J. Warren 1976-1987 (BD)
Don't Look Now: Collector's Edition (DVD/BD/4K)
Dumbo [2019] (DVD/BD/3D/4K)
Glory (4K)
The House That Dripped Blood: Limited Edition (BD)
The Legacy (BD)
Schramm: Limited Edition (BD)
Us (DVD/BD/4K)

August 05

The Colossus of New York (BD)
Crack in the World (BD)
Domino [2019] (DVD/BD)
Gloria Bell (DVD/BD)
Kiss Me Deadly (BD)
Missing Link (DVD/BD)
The White Crow (DVD/BD)

Black Mirror's Living Doll

Writer Charlie Brooker discusses Season 5's Miley Cyrus/Al mashup

With Emmy-award winning anthology show *Black Mirror* dropping its fifth season on to Netflix, *HCC* spent time with creator/writer Charlie Brooker and executive producer Annabel Jones to learn more about *Rachel, Jack and Ashley Too*, certain to be the breakout episode in the new three-episode run.

Inspired casting sees Miley Cyrus deliver a jaw-dropping turn as Ashley O, a teen music star desperate to escape her pop princess image, but shackled by an evil management who will do literally anything to keep the money machine rolling.

Riffing just as heavily on the entertainment industry as it does tech – there's AI, holograms and Smart Assistants a plenty – the story is the most overtly entertaining *Black Mirror* yarn since the multi-award winning *USS Callister* (S4, episode 1).

'It really depends on the story that we're trying,' says Brooker on the episode's humour-laden treatment. 'There were so many sort of big flavours and elements in it that it made sense to take it in that direction. We always know that some episodes are going to piss people off; that some people are going to appreciate one type of story more than another. I think that if we just kept doing nihilistic bleak stories, then it becomes very, very predictable. So sometimes we like to go a bit Pixar, and other times we like to go a bit *Texas Chainsaw Massacre*. It really depends on our whim.'

As for Miley Cyrus, the writer reveals that while the story seems a perfect fit for the pop icon, it wasn't originally written with her in mind.

'These stories come about in a strange way. It was an idea I'd had for a while. Originally I had an idea about a punk band from 1977 being resurrected in the present day. I tried to write a sitcom about that. Then it was going to be about a rapper. Then we had a conversation about Alexa and I seem to remember saying that soon there'll be ones based on celebrity personalities...'

'Her [Miley Cyrus] whole career has been about the Disney pop star trying to carve out her own identity, facing opposition

from her label,' adds Annabel Jones. 'So she's been on that journey. She found it hilarious.'

No phones for you

Brooker, who first created the sci-fi anthology series for Channel 4 in 2011, reports that Cyrus's own experiences informed the episode's development. 'I remember being struck by her saying that she'd recently made an appearance on stage with some act aimed at an older generation, I don't know who it was, maybe The Grateful Dead or somebody. And she went on stage and looked down into this massive auditorium, and no one was filming it on a phone – they're all looking at her. She hadn't seen that for about 10 years, it was just a sea of human faces. She found that quite emotional.'

Explains Jones: 'She was asking, does it matter that I'm on stage or whether I'm a hologram? It's the whole question about what it is to be an artist and what it means to perform... and the relationship between the idol and the fan.'

This is where the Ashley O AI doll (called Ashley Too) comes in, which – along with the casting of Cyrus – is the episode's water cooler moment.

'We wanted the doll to feel plausible, something that you could probably buy if you wanted to,' says Jones. 'So it was a matter of trying to make it as simplistic as possible, but trying to give it animation. Trying to achieve both of those things was very difficult.'

Adds Brooker: 'We needed two degrees of expression. At the start it has to look sort of non-threatening, like an Alexa-type device. Then in the second half, the same simple eyes had to be very suddenly a lot more expressive. Its movements become more fluid.'

Another bizarre aspect of *Rachel, Jack and Ashley*

Too is that all the songs performed by Cyrus are actually culled from the catalogue of industrial rock band Nine Inch Nails, but given pop twists. 'That was in the script early on,' says Brooker. 'We had to get permission from Trent Reznor. He got it straight away. He found all the dark comedy very entertaining. 'You know, there are lots of dark concepts in the film. The idea of an artist being more successful when they're dead than when they were alive is such a ghoulish idea, but then we're living in a time where you can see holograms of Prince...'

Black Mirror: Season Five is available now on Netflix.

This month's top 10 news stories in handy, bite-sized chunks...



1 The hills are alive in Bradford

Dates and some (but not all) of the programme for the 23rd annual Widescreen Weekend film festival have been announced. Housed at the National Science and Media museum's Bradford complex, the four-day festival of screenings, guest talks and special events begins October 10 and will include *The Sound of Music* shown via a new 70mm print, and a Marvel superhero double-bill, where a 35mm presentation of *Blade* will be followed by *Black Panther* in IMAX 3D.

2 Cutting the cost of entry

Wharfedale has lowered the prices of its entry-level D300 Series speakers, after 'identifying ways in which costs may be further reduced without impacting on the quality and performance.' The D330 floorstanders now sell for £350 per-pair (previously £500), and there are also savings on centre and bookshelf models.

3 Two becomes four

The ODEON cinema chain and Dolby have revealed two more Dolby Cinemas will be opening in the UK this Autumn. ODEON Manchester Trafford Centre and ODEON Luxe Birmingham Broadway Plaza are lined up for the state-of-the-art screens, joining the existing London Leicester Square and Leeds Thorpe Park venues.

4 You're terminated

Chord Company customers can now get 'factory-quality' speaker cable terminations from some of its UK dealers – saving time over having the work done at the company HQ – thanks to the roll out of a bespoke ChordOhmic Hex Gun crimping tool.

5 Do not forsake me, oh, my darling...

Director Fred Zinnemann's iconic Western *High Noon* is joining Eureka's Masters of Cinema Blu-ray range on September 16. Sourced from a 4K restoration, the initial run will be limited to just 3,000 copies and comes with an exclusive 100-page collector's book and hardbound slipcase.

6 Sky doubles up on output

Sky has unveiled plans for a new development/production venture called Sky Studios, which it says will help it double its investment in original programming over the next five years. 'Our ambition is to make Sky Studios famous for quality content and a place where Europe's top creatives will want to do their best work,' says chief exec Jeremy Darroch.

7 Avengers to oust Avatar?

By the time you read this, *Avengers: Endgame* may have overtaken *Avatar* to become the highest grossing film of all time – helped by Disney re-releasing the superhero flick with some bonus footage to lure fans back for a second viewing. At the time of writing, *Avatar* still held the global box office record (\$2.788bn), with the Marvel caper just \$40m behind. Could be close...

8 Room for one more?

Amazon has said it will launch its 'IMDb TV' movie and TV streaming service in Europe later this year. The platform offers free (ad-supported) viewing of content via deals with several Hollywood studios including Warner Bros., MGM and Sony Pictures.

9 Cleer and present

US headphone/wireless speaker specialist Cleer has launched in the UK, choosing to kick off with its noise-cancelling Flow headphones. The over-ear £250 models promise to eliminate 'nearly 99.5 per cent of exterior noise,' and will be sold in Harrods.

10 Arrow gets extreme

Originally released by (the now defunct) Tartan Video, South Korean filmmaker Park Chan-wook's 2003 revenge thriller *Oldboy* returns to UK Blu-ray on August 26, courtesy of Arrow Video. Available as a 'standard' two-disc release and a three-disc limited edition (pictured), *Oldboy* has undergone a brand new 4K restoration and is supported by a plethora of goodies including five audio commentaries, a feature-length *Making of...* and a three-and-a-half-hour video diary.



News x10

Premiere...

What's happening in the world of TV and films...

Dune heading to TV



Director Denis Villeneuve hasn't even finished shooting his bigscreen reboot of Frank Herbert's sci-fi classic *Dune*, but plans are already in place for a smallscreen spin-off. Villeneuve will also helm the pilot of *Dune: The Sisterhood*, a series developed for the WarnerMedia streaming service, which will focus on the mysterious Bene Gesserit.

From vampire to bat

Twilight star Robert Pattinson will be donning the Batsuit as the title character in director Matt (Dawn of the Planet of the Apes) Reeves's upcoming DC Extended Universe reboot *The Batman*. Pattinson beat out Nicholas Hoult, who was also being considered for the role.

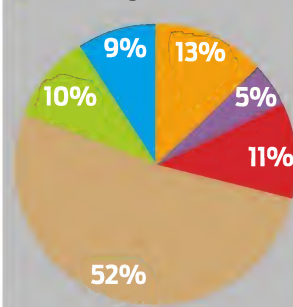
'You can't see me!'

With Dwayne Johnson sitting out the ninth *Fast & Furious* film, producers have tapped John Cena, another pro wrestler-turned-actor (last seen in the *Transformers* spin-off *Bumblebee*), to up the film's muscle quota.

We asked...

Which is the best Batman movie?

■ *Batman* ('89) ■ *Batman Returns*
■ *Batman Begins* ■ *The Dark Knight*
■ *The Dark Knight Rises* ■ Other



Results from www.homecinemachoice.com
Go online for more polling action

Lightning strikes for DC

Shazam! → Warner Bros. → DVD/Blu-ray/3D Blu-ray/Ultra HD Blu-ray



There's a whiff of the classic Tom Hanks comedy *Big* about this DC Extended Universe box office smash, which stars Asher Angel as a 14-year-old foster child given the ability to transform into an adult superhero (played by Zachary Levi). *Shazam!* leaps on to Ultra HD Blu-ray in the UK on August 12 with Dolby Vision 4K visuals and Dolby Atmos audio (the latter also included on the 'regular' Blu-ray). Bonus goodies include five behind-the-scenes featurettes, deleted scenes and a motion comic.



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Face to Face

Topics of discussion on the HCC Facebook page

How often do you go out to the cinema?



Probably about a half dozen times a year for big event movies. But that's about it now. Not just cost – the whole experience is dulled by people eating and drinking loudly. **Matt Greaves**

Twice a week at least. **Darren Wells**

Not so often now, too much stuff on Amazon and Netflix. It's usually superhero stuff that gets us out. **Mike Short**

Once a year or so, because that's why I built one in my home! **Dav Sav**

What you're watching on your home cinema...



Just watched *Man of Steel* 4K, fantastic disc. 4K *Dunkirk* to watch over the weekend.

Gary Ward

The new Shout Factory BR of *Earthquake* is going to be paired with... something.

John Hudson

How to Train Your Dragon 3 in 3D – great. *Last Airbender* in 3D – awesome. *Mortal Engines* in 3D – fantastic.

Theo Coetzee

I'm watching *The Black Cat*, *The Cat O' Nine Tails* and *Runaway Train*.

Robert Corrigan

The Hunt For Red October 4K, and the amazing 4K copy of *Alien* I just won from Home Cinema Choice!

Mike Wadkins

I've just had *Wheels on Meals* drop through my letter-box thanks to HCC. You've made my weekend!

David Lister



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Back of the 'net

Trailers, technology and more to check out on the web



Knife to meet you

Sylvester Stallone caps off his *Rambo* series this September with...*Last Blood*. This time it's a Mexican drug cartel that has raised John Rambo's hackles – Lionsgate's trailer suggests fans can look forward to more of the knife-throwing, bow-and-arrow wielding ultra-violence of the previous 2008 instalment. youtu.be/yzbcXGRUZ8w



Wakey wakey

Stephen King's novel *Doctor Sleep* – a sequel to *The Shining* – gets a Hollywood makeover with Ewan McGregor taking on the role of Danny Torrance. The film is billed as sharing 'the same cinematic universe' as Stanley Kubrick's *Shining* adaptation. In cinemas in October. youtu.be/2msJTFvhkU4



Taken for a ride

Wrestler-turned-actor Dave Bautista flexes his comedic muscles in *Stuber*, playing an all-action cop who commands an Uber driver to help him track down a terrorist. Coming across a little bit like Michael Mann's *Collateral* played for laughs, this looks like frothy fun. In cinemas this month. youtu.be/wMCUWR50DKY



Two-channel AV

Denon has combined its hi-fi and AVR knowhow into its new DRA-800H – a stereo amplifier/receiver with 4K HDR-capable HDMI support (five inputs and one ARC output). Other features include a subwoofer pre-out, HEOS multiroom and streaming service integration, plus voice control. Price is £600. www.denon.co.uk



TOP PICK

Looks familiar

For its Britain on Film project, the BFI is matching locations from 1000s of films in its archive to a searchable map of the UK – and asking for contributions from the public. A great tool to trawl through a century of vintage footage, and discover if your postcode has a hidden filmic history. player.bfi.org.uk/britain-on-film



Bring on The Wall

Samsung has announced its modular LED TV system – The Wall – is now available. Targeted at business/professional applications and those after a bespoke solution for a 'media room, home cinema or private luxury yacht,' there's no mention of price. Instead you fill in your details and Samsung will be in touch... www.samsung.com/uk/the-wall

Look who's talking

Yamaha YAS-209 → uk.yamaha.com



Yamaha's new YAS-209 brings integrated Alexa voice control to its soundbar range for the first time. Arriving in September priced £400, this stereo TV audio booster ships with a wireless 6.5in subwoofer and includes 4K HDR-capable HDMI in/out, Bluetooth streaming, and Dolby Digital and DTS decoding on its spec sheet – the latter with Virtual:X surround processing. Onboard Wi-Fi enables music playback via Spotify Connect, Amazon Music and more, and control through Yamaha's iOS/Android app.

Focal reaches for the stars

The Astral 16 packs Dirac, Dolby Atmos and DTS:X functionality into an unusual 12-channel amplifier/16-channel processor design. **Mark Craven** grabs a first listen



The Astral 16 means the brand can offer a 'full solution' for high-end home theatres, says Focal's Nicolas Debard

FOR THE LAST few years Focal has been noticeably moving deeper into the dedicated home theatre market. The French audio company remains a purveyor of audiophile-grade hi-fi speakers and headphones, and an avenue for in-car enthusiasts, but has expanded its 'custom integration' portfolio. In *HCC* #289 we reported on the product developments under way at its Saint-Étienne HQ and the introduction of its 100 Series and 300 Series in-wall/in-ceiling models. A year later and Focal has a new arrival – and it's not a speaker.

The Astral 16 is described by the company as an 'audio-video processor and amplifier.' It's a clumsy term, but I'll cut Focal some slack, as the product's combination of 12 channels of onboard power and 16-channel processing doesn't lend itself to

pigeon-holing. It's not a 12-channel AVR (it doesn't have an in-built radio tuner, for one thing – or any Wi-Fi or Bluetooth streaming provision), nor solely an immersive processor. Look around for a competitor product and you might consider Denon's 13-channel AVC-X8500H, but the near £17,000 price gap (the Astral 16 retails for £20,000) signifies this is a very different proposition.

Joining forces

Focal proudly states the Astral 16 is its 'first ever 16-channel audio-video processor and amplifier,' but it's also its first AV processor, full stop. To birth it, Focal turned to French corp Immersive Audio Technologies, parent company of premium processor/amplifier marque Storm Audio – those

with a knowledge of pro install hardware might notice a resemblance between the Astral 16 and Storm Audio's I.ISP 3D.16.12.

The product, says marketing manager Nicolas Debard, came about through a desire to offer 'a full Focal solution when it comes to our high-end home theatre range, be it on classic loudspeakers or CI as well.'

The result is a single unit (albeit a sizable one – it's 49cm deep) combining those dozen channels of power with discrete processing of 16. Class D amplifiers from pro audio designer Pascal Audio are employed, spread across three power supplies handling four channels each, with output rated at 200W per channel into 8 ohm loads (at 0.1% THD with 12 channels driven).

The Astral 16's backplate features 12 sets of speaker binding posts, plus a quartet of balanced XLR outputs to feed another amplifier. So, while out of the box it's ready to run a 7.2.4 Atmos/DTS:X setup, or Auro-3D 10.1/11.1 system, more expansive immersive systems can be governed. Or you could stick with a smaller installation and bi-amp LCR channels, run separate audio-only zones, or another home cinema array entirely. Focal says the channel configuration potential is 'unlimited'.

A web-based interface is employed to give users control over the Astral 16's setup complexity. Feature tricks include graphical real time analysis, not to be used for accurate calibration, but to give an overview of what's occurring in your setup; monitoring of temperature/fan speed and more through the RemoteMonitoring tool; a customisable test tone generator; and a more in-depth 'Expert Bass Management' function. Those with no desire to have a laptop permanently on call can use the app (currently only for iOS), which mirrors the Astral 16's web UI.

Ahead of the curve

The AV amplifier can be fully manually configured, and allows for Room EQ Wizard (REW) filters to be imported, but for automated EQ to make sure all



For a 7.2-channel demo of the Astral 16, Focal used its Kanta speakers, but it's perhaps more likely to be used in systems with in-wall/in-ceiling models



The processor is supplied with a calibrated mic

those channels and your chosen speaker array play nicely in your cinema room, the processor supports Dirac Live EQ. The same system has found its way into cinema-grade hardware from the likes of Datasat, Arcam, Theta, NAD, AudioControl and the aforementioned Storm Audio, so it's presence here is expected. The onboard Dirac implementation features full 20Hz-20kHz target curve adjustment.

For a teaser demonstration at the 2019 Expert Sound and Imaging (EISA) Convention in Antwerp, in advance of the Astral 16 launching at retailers, Debard set up the unit with a 7.2 speaker system using Focal's Kanta models.

As a first impression it gave only an inkling of the Astral 16's full potential (an immersive Dolby Atmos demo would have been preferable), but the combination of the processor's Dirac Live EQ, the soundmixes of mountain mayhem movie *Everest* and WW2 drama *Unbroken*, the Kanta speakers' high-quality performance, and the Astral 16's amplifier power resulted in an experience that – even in an uncompromising, largescale listening space – was spine-tingling at times. Effects arrived with intense clarity, and bass response was even across subs and speakers.

Joining the Astral 16's forward-thinking audio calibration is a connections suite tailored to 4K playback. Analogue video inputs are ignored, but the HDMI stage includes seven HDMI 2.0/HDCP 2.2 inputs and a pair of similarly specced outputs, one with eARC. Dolby Vision and HLG HDR passthrough are supported.

Regards HDMI 2.1, Debard says an upgrade is likely, with Focal currently waiting for feedback from suppliers. 'We will have more news in September.'

For installers, the AV amplifier is supplied with a rack-mounting kit, and is compatible with Crestron, Control4, Savant, and RTI home automation systems.

Says the company of its new AV toy: 'Focal has turned its desire to offer a complete, prestige solution for the home cinema world into reality. The resulting product is truly in a class of its own' ■



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
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'The invention of MP3 was massive – and it was first seen at IFA'

Steve May weathers a blizzard of facts and figures at the annual preview conference for Europe's biggest technology show, and finds the hunt is on for another 'Black Swan'...

OLED IS ON a charge, the 8K hype train hasn't left the station, and the AV business generally is looking pretty good (with caveats). These were three main takeaways from the annual IFA GPC (Global Press Conference), held recently in southern Spain.

The event, a preamble to the techquake that is the IFA Berlin show in September, is always a feast of facts and figures; a veritable tech tapas served up by experts who monitor real-world sales and trends, providing a unique barometer of what's hot and what's not. And according to these market

gurus, OLED TV is definitely looking toasty, while 4K penetration booms.

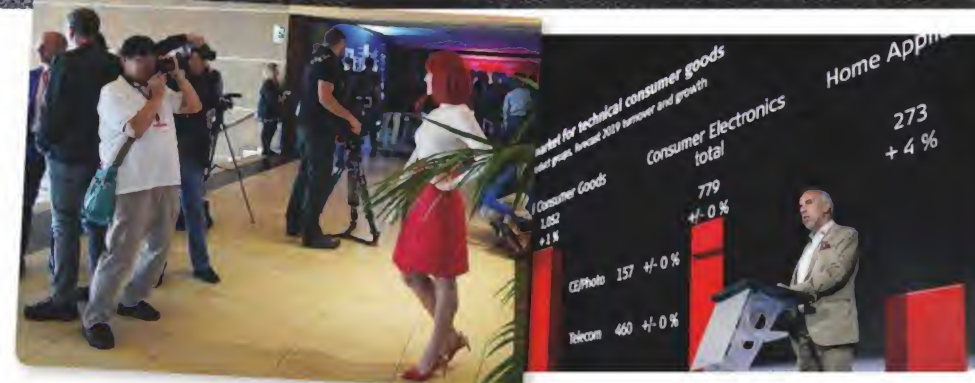
It's predicted that around 214 million TVs will be sold globally in 2019, of which 108 million will be Ultra HD resolution – and the premium end of the screen business is being totally dominated by OLED. By the end of the year, self-emissive screens from multiple TV brands will account for just over 50 per cent of the high-end market in volume, and a massive 70 per cent of the value. The technology, birthed as a largescreen concern in 2013 by LG, is booming.

As for flatscreens in general, it seems European TV buyers are prepared/made to pay more than any other region, with an average selling price of €471 (high-end TVs are balanced out by super-cheap commodity panels). North America comes second, at €433, with Asia third at €409.

Globally, China is the new power player in the room; when it comes to consumption of technical products, the country is actually neck and neck with Europe. And as Chinese brands, such as Huawei, rise to prominence in the smartphone arena, it looks like a similar takeover bid is on the cards regards TVs. You can expect to see some new names jostling for position amongst the old favourites.

One is Metz. This quintessential German TV marque, based in Bavaria, is now owned by Chinese giant Skyworth. At the IFA GPC, Skyworth announced the Metz Blue TV brand would be rolled out internationally, after its introduction into China later this year.

Chinese corp Skyworth plans a global rollout of Metz-branded TVs



The Skyworth Group, based in Shenzhen, is a panel production powerhouse (in 2018 it declared a revenue of 6.2 billion dollars) and Metz CEO Norbert Kotzbauer told conference attendees that Skyworth 'was one of a number of brands who are number one in China.' Which, if you've been to a few Chinese electronics company launches, was rather witty. '4K LED LCD, 8K and OLED technology is all available to us,' he declared. 'But as a global player you need to be driven by volume.'

Perhaps the most exciting Chinese brand you've maybe not heard of is TCL. The company used the IFA GPC to outline ambitious growth plans (including an expansion into audio-only products), revealing it has access to a number of leading-edge display technologies, such as printed OLED screens, Quantum Dot and Mini-LED backlit sets.

In line with a number of other TV makers, it's planning on standardising support for Dolby Vision and Dolby Atmos in its flatscreens, with sound systems supplied by Onkyo, and introducing HDR10+ playback. Screen sizes will range up to 85in.

TCL has prized open the door in France and Germany, but has yet to make much of an impact in

the UK, having only launched here last Summer with entry-level models. Hopefully we won't be left waiting for its higher-spec propositions to hit retailers; upcoming premium sets include the 75in Q X10S 8K model, a Mini-LED QLED design – here, an incredible 20,000 tiny LED lamps provide 1,000 local dimming zones. Other TV majors have looked at utilising Mini-LED as a backlight source, but the technology has seemingly proved too expensive to mass produce.

8K's slow start

Hisense also used the IFA GPC to preview a 75in 8K U9 Series model. It'll debut in China by the end of the year, and could conceivably arrive in the UK sometime in 2020.

However, despite considerable braggadocio from some quarters and a growing band of manufacturers onboard, it seems TV buyers have yet to embrace the concept of 8K TV – perhaps understandable given the lack of native content and the high price of first-generation products.

According to IHS Markit executive director Maria Rua Aguiete, a mere 18,600 8K TVs were sold in 2018, >

IFA 2019

Six days of tech lined up – and you can check it out...



The IFA show, which once again will take over the Messe Berlin venue this September, is open to members of the public – unlike its US rival CES. This consumer-friendly attitude encourages its organisers to describe IFA as 'the leading showcase for the global technology industry', as does the repeated presence of major marques including Samsung, Sony, Philips, LG, Panasonic and Hisense, which often choose the expo as a launchpad for new products and concepts.

Last year's show, the biggest in IFA history since it launched in 1924, featured more than 1,800 exhibitors across 161,000 square metres of floor space. The scale of the event explains why it now runs for six days (beginning this year on September 9). Day tickets are available for €13.

See www.ifa-berlin.com for more.

Above left: Show mascot 'Miss IFA' does the rounds at the GPC

Above right: Hans-Joachim Kamp, chairman of IFA organiser Gfu, outlines industry facts and figures

UK streaming

Blighty fares well for 4K video-on-demand...

NETFLIX

You may not realise it, but the UK 4K VOD content market is one of the healthiest in the world. IHS Markit surveyed all the key UK outlets in February this year, and reports that Netflix is in the lead when it comes to UHD content, with 415 titles available. Amazon runs it a close second, with 303 titles and Sky third with 287 titles. BT TV lagged behind with 118.

Of all the suppliers, Amazon is the fastest growing, with its UHD library expanding by 346 per cent in a year.

IHS Markit also offered an intriguing insight into consumer priorities.

For most buyers, the best reason to upgrade their TV isn't to get 4K at all, it's more about size and smart connectivity. Its research also suggests that for regular folks, energy efficiency is more important than UHD image quality. Go figure.



Dr. Andreas Sennheiser (below left) launched the brand's Ambeo Soundbar

which when you filter out purchases made within the industry itself – R&D engineers like to forensically examine rival offerings – is infinitesimally small.

However, the 8K panel market could take as much as 40 per cent of the business by 2022, she suggests.

How does 4K stack up? Sixty-three per cent of all TV shipments in Western Europe are now 3,840 x 2,160 resolution, reports IHS Markit, but North America leads the way, where – by 2022 – nearly 60 per cent of households are predicted to own a UHD set, compared to 40 per cent in Western Europe.

China is the second largest 4K TV market, thanks to low prices on monster UHD screens. Unlike in Europe, Chinese buyers have little 4K content to view, but as irrepressible early adopters of technology that's not going to put them off.

There's a different tech story in Japan, where the preference is for smaller panels. So while the Tokyo 2020 Summer Olympics will be a launchpad of sorts for 8K via the provision of coverage by state broadcaster NHK, mega-sized screens are unlikely to find an audience in the host country.

The biggest buzz in consumer electronics continues to be around smart speakers and headphones, and there's still plenty of interest in soundbars. The latter grew 23 per cent between 2015-2018, while over the same period the multiroom speaker market – driven by the rise of voice control and AI assistants – grew by 76 per cent, which is huge.

Yet an umbrella overview of the consumer technology market shows a steady slowdown, although we're still in positive territory. According to analyst GfK, growth was three per cent in 2018. The forecast is for a measly one per cent rise this year, but the market is still worth a staggering 1,052 billion euros.

Digging deeper reveals that 44 per cent of the 2019 technical consumer goods market is dominated by telecoms (so that's smartphones), with 17 per cent coming from large kitchen appliances, 15 per cent from IT, and (surprisingly) nine per cent from



toasters and kettles. The remaining 15 per cent belongs to our team, consumer electronics.

One reason given for the gradual slowdown is lack of innovation. Speaking at the IFA conference, Dr Christian Goke, CEO of Messe Berlin, says 'innovation does not happen in a straight or an even pace,' and that 'Black Swan' [once in a generation]

events are rare. 'One Black Swan event was the invention of MP3. It was transformative – and it was first seen at IFA.'

The next big fillip is widely expected to come from 5G. The super-fast, super-fat data pipe has the potential to up-end everything, from streaming services and TV distribution to home networking and smart gadgets. The next few years could see the CE business put the pedal to the metal once again.

Soundbar benchmark?

The 2019 IFA GPC was a good one for Sennheiser. The brand was announced as an official Global Audio Partner to IFA 2019, and had attendees forming an orderly queue to listen to its long-awaited Ambeo soundbar.

We had an early ears-on and reckon this (very) big 'bar could be about to set a new benchmark in single-box sonics. Compatible with Dolby Atmos, MPEG-H and DTS:X, the system delivers an uncanny 5.1.4 style-listening experience, without any additional rear speakers, thanks to a proprietary virtualization technology jointly developed with the Fraunhofer institute.

Designed for everyday rooms, rather than dedicated cinema spaces, the Ambeo soundbar takes advantage of wall reflections and comes with a substantial microphone and stand for bespoke calibration.

The 'bar sports 13 drivers (six long throw 4in woofers, five tweeters and two top-mounted upfiring units). There's no subwoofer supplied, but its bass response is deep, reaching down to a claimed 30Hz. In full flight, it's hugely impressive. Check back next issue for a full review ■

LYNGDORF

There may be a reason for picking an alternate high-end processor like Datasat or Trinnov, but the MP-50 and SDA-2400 amplifiers are equal to or better than those other processors when it comes to sound quality.

These products are now in a class of their own.

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Featured image: Cotswold Home Cinema

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Team HCC picks a selection of Blu-ray platters that are perfect for showing
off the talents of your AV system – from creepy horrors and superhero
smashes to sci-fi stunners...



2001: A SPACE ODYSSEY

'Open the pod bay doors, HAL'

One of the greatest things about 4K Blu-ray is the new lease of life it's injecting into old classics – and Warner Bros.' release of Stanley Kubrick's *2001: A Space Odyssey* is the current poster boy for the back-catalogue revolution.

The 4K picture for this platter has been created from a meticulously restored 8K scan of the original film negative. It's presented in both HDR10 and Dolby Vision, and every frame (once you get past the three-minute opening black screen) looks spectacular to an extent I never thought possible for a film first released in 1968.

It's therefore a great demo disc to convince 4K HDR sceptics and challenge your display, and the wow factor comes not from just the sheer clarity of the image. There's also the incredible way the HDR brightness range has been applied to *2001*'s often brutally stark visuals. This kicks off at 03:10, as the sun rises above the Earth, causing a backlight meltdown for all but the best LCD TVs.

The intensity of spotlights surrounding the moon monolith (from 50:58) is phenomenal, puncturing the picture like a torch shining through a hole in the screen. With OLED TVs you're looking for how well they reproduce the intensity of the brightness (the disc is mastered to 4,000-nit peaks) and the purity of the white colour. With LCD screens you're looking for 'flaring out' and potential greyness or backlight blooming in the space backdrop.

At 20:07 the image shows a white spaceship on the right of the screen, with the ultra-bright surface of Earth to top left, and this again presents a real test of both LED backlighting and OLED brightness and colour shift. This shot also boasts a dense starfield that reveals how good a display is at retaining subtle light details in dark areas. Similar tests of backlight consistency and control can be found throughout the moon approach sequence from 45:38–46:50.

Then there's the shot at 01:06:03 (where Dave plays chess with HAL), with its bold, precise lighting and subtle colour in the screens/skin tones. And you've never experienced terror until you've seen HAL's red eye boring into your skull in HDR... **JA**



Christopher Nolan supervised the 4K restoration of Kubrick's classic sci-fi

Overlord: WW2 horror caper with a bass-rich Dolby Atmos soundtrack



OVERLORD

Battle of the bass

No one expects a film about Nazi zombies to boast a subtle soundtrack, and in that regard *Overlord* doesn't disappoint. The 2018's flick's Dolby Atmos soundmix revels in the lunacy of its LFE track, throwing in a shedload of bass at every opportunity. Low-frequency energy is used to boost just about everything from explosions and gunfire, to engine noises, flamethrowers and even punches (which frequently sound like someone being hit with a sledgehammer). It's the kind of mix your subwoofer will love. Your neighbours, less so.

The scene where the protagonists ambush ranks of German soldiers is a great test of a sub's speed and agility. It begins with a grenade stuffed into a man's mouth erupting with genuine tangible impact (I said it wasn't subtle), before our heroes open fire with a heavy machine-gun. You want your woofer to be fast enough to keep pace with the gunfire, and the bass should crossover with your systems's midrange precisely, giving each shot a percussive kick.

However, the sequence that will best demonstrate your setup's ability to handle bass in a controlled and effective manner actually comes near the beginning of the film (06:30–09:25). As our intrepid paratroopers fly into Nazi-occupied Normandy, their Dakota aircraft suddenly hit a barrage of flak. As the ordinance explodes in the air and buffets the planes, you should feel a physical thump that is perfectly timed with each impact.

After that, armour-piercing rounds tear through the fuselage with a visceral force that'll have you diving for cover. Then all hell breaks loose, with airplanes bursting into flames in mid-air and the main aircraft exploding at the rear. Metal buckles and rips all around you, engaging each channel before our main character jumps out the door and tumbles through the air.

Some people say less is more, but in *Overlord*'s case more is more! **SW**

AQUAMAN

Eye-watering HDR

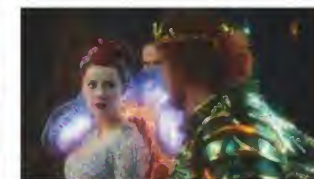
As well all know, the 4K BD format isn't just about the resolution jump from 1080p. More often, it's the application of HDR and wide colour that grabs our attention. The recent UHD outing of this smash-hit superhero flick is a case in point – clarity is fine, but not reference-grade (it's based on a 2K DI), yet it paints a picture that's colour-rich and dynamic in the extreme. Of course, the disc's HDR10 grade (there's also Dolby Vision if your display can handle it) delivers its best on TVs with sufficient brightness and colour handling, and precise illumination.

While there are eye-catching moments during the surface world sequences (particularly Chapter 9's sun-drenched trip to Sicily, which offers skies and fluffy clouds that are prone to bleaching out), it's when *Aquaman* goes underwater that the WCG and HDR tools are used to their fullest.

There are the crisp white environs of Orm's throne room (Chapter 6), the bubbling lava during the Ring of Fire trident battle (Chapter 7), and the frequent bioluminescent light sources floating around to give your TV/projector's colour accuracy/light handling a push – as well as a tricky shot of daylight piercing dark sea depths (Chapter 12, 01:49:31) that often exhibits banding. Yet my personal favourite sequence is the largescale aquatic scrap between Orm's forces and Aquaman and his crustacean allies (from 01:55:05 to 02:03:21). This features countless tiny HDR details as the battle rages, be they reflections



Bright red hair, green suits, orange flames, blue lights – when it comes to colour *Aquaman* has it all



on Orm's body armour or the vibrant green laser fire, plus entire shots bathed in diffuse, subtly shifting red tones while glowing fireballs streak across the screen. When Aquaman belatedly arrives, the Trident of Atlan should be an intense glowing yellow, rather than a muted mustard. And when he shares a slo-mo embrace with Mera (02:01:01), the sheer beauty of the HDR/colour tapestry should make you weep. Or maybe that's just me... **MC**



John Krasinski (left) co-stars with Emily Blunt and also directs

A QUIET PLACE

Sshhhhhh!

Long-term *HCC* readers will know this is a movie I return to often – a film about people trying not to make any noise that, ironically, has a Dolby Atmos mix that's a masterclass in sound design.

A Quiet Place is perfect for demonstrating delicacy and subtle detail retrieval, while at the same time showcasing an astonishing dynamic range. If that wasn't enough, there is full-bodied bass effects and plenty of surround sound immersion to test the tonal balance of your speakers.

The track is rife with subtle sounds emanating from each channel, testing your cinema's ability to create a natural, seamless hemisphere of sound. It should also be able to render the tiniest detail – be it a character's breathing or buzzing insects – with believability. Certain scenes are from the point of view of a deaf character and at that point there is genuinely no sound, making the ambient noises more obvious.

When a loud noise is made *A Quiet Place* uses dynamic range to give that sound an astonishing impact. Not only will you jump out of your seat, it'll challenge your amp/speaker combo, requiring an instant shift from near silence to full-throttle. These scenes will demonstrate its ability to handle transients, but also reveal any limitations in your amplifier's headroom.

One such moment (45:50–49:30) involves Emily Blunt's character trapped in a basement and being hunted by a monster. When the creature first makes a noise it seems incredibly loud, and then you begin to hear it moving overhead. The LFE track weighs in at this point, giving the beastie added scale and threat.

Blunt's character then uses an alarm clock to distract it, and you can hear the subtle ticking of the clock and her efforts to breathe quietly. The monster moves, located in the rear/surround speakers, before the alarm clock goes off (d'oh!), causing it to react with another scream and making your room a not-so-quiet place... **SW**



Good news for fright fans: *A Quiet Place 2* has gone into production

READY PLAYER ONE

'He gave us a place to go'

Steven Spielberg knows when to bring out 3D, and when to leave it in its box. There was never any question of his 2017 Pentagon Papers drama *The Post* getting a stereoscopic makeover; and there was surely no chance of this sci-fi adaptation not getting a 3D presentation. The content demands it.

For an example of exactly how effective 3D can be in creating an immersive, eye-opening experience, compare *Ready Player One*'s real-world sequences with those in its Virtual Reality game. The former are still stereoscopic, but the depth of image is dialled down. When the action moves to the Oasis, Spielberg ramps up the playfulness and scale, while the boosted depth serves the purpose of helping to delineate the action in the frequent, complex scenes packed with characters and objects.

The movie doesn't waste time getting there, with Wade donning his headset in the opening chapter and taking us on a narrated tour. Spielberg sets out his stall with the 'Oasis' logo spinning towards your seat as we enter the game, and then the camera swoops and dives through a continually evolving landscape. The 3D encode delivers the sensation of racing through, while central elements (including Dorothy's house from *The Wizard of Oz*...) provide ever-changing focal points.

It's dizzying stuff, and only a teaser of what's to come. If you have friends convinced that 3D is old hat, show them this. **MC**



Ready Player One was shot 2D and converted to 3D in post-production

MAD MAX: FURY ROAD

'Max? Where are you?'

The Atmos track for this post-apocalyptic chase movie is now a go-to multichannel demo, but I also keep it on hand for testing the mettle of a stereo/virtual surround soundbar.

As any two-channel aficionado will tell you, you can still get scale, soundstage depth and effects location from just a pair of speakers. Just possibly not the ones built into your flatscreen TV.

A good stereo soundbar, and those with pseudo surround pretensions, will take *Fury Road*'s soundmix and remap it to the driver array, while maintaining the sense of width and imaging. Nowhere is this more apparent than in (handily) the film's opening moments, as Max's narration is joined by some scene-setting audio news snippets about the collapse of civilisation, followed by the ghostly voices of his dead wife and daughter. Our hero's gravelly monologue remains dead centre, but the other effects are cast left and right (and far), and not in uniform fashion. The result, even in stereo, is of an expansive wall of sound, with bass details that disappear on lesser gear.

Oh, and the engine roar that kicks the whole thing off ought to sound thrillingly loud and resonant. It's a car with a V8 engine, not a moped. **MC**



Fury Road (top) and *House of Flying Daggers* (bottom) – aural showcases from the past and the future

HOUSE OF FLYING DAGGERS

She Bangs the Drums

This wuxia drama has graced countless demos thanks to its famous drum sequence. This scene (from 11:19) involves Andy Lau testing the hearing of a blind Zhang Ziyi – she's surrounded by drums, and he has a bowl of pebbles. As he flicks a stone at a drum, the sound reverberates and she responds by hitting that particular drum. A cool trick, and one that makes for a stunning 5.1 showcase.

As each pebble hits a drum, there's a high-frequency ping followed by a reverberation that emphasises the tightness of the skin. The resonance subsides, and Zhang's character hits the same drum with her scarf, an effect reinforced by your subwoofer. So while there's detail to resolve, there's also a need for speed and agility, and bass integration.

As the scene continues pebbles bounce from drum to drum, and Zhang responds in turn. The mix tracks the action from channel to channel; the sound should be tight and precise, but lesser systems will struggle to define each specific effect and frequency. And as Zhang hits drum after drum, the control of the subwoofer is also laid bare.

Finally Lau throws the remaining pebbles into the air, and Zhang hits the drums in a flurry of balletic movement. Your room should be energised across the entire frequency spectrum, but remain clear and cohesive. And that is the echo game, or as it's better known the 'drum sequence'. **SW**



Blade Runner 2049 earned cinematographer Roger Deakins his first Academy Award



BLADE RUNNER 2049

What happens in Vegas...

This is arguably the ultimate 4K Blu-ray demo disc, and a sequence I return to time and again is the one at Sapper Morton's grub farm. Starting at around 02:25, the scene contains pretty much everything you need to check out a TV. There's the brightness and colour intensity of the dashboard lights in K's spinner alongside the shadow detail in the blackness around them. There's the difficult light management of the scenes in Morton's house where bright windows puncture an otherwise very dark room. There are the beautiful colour subtleties of K and Morton's skin tones. Face and clothing detailing is immense. The white skies outside Sapper's home test full-screen HDR brightness levels, backlight consistency, and colour neutrality.

Two other highlights are the moment where K is approached by three women in a city square (42:51-46:11), and the Las Vegas sequence (1:40:34-2:01:33)

In the first of these, we're treated to vibrant neon signs, glowing holograms, and shifting colour mist and smoke 'washes', right alongside the dull but shaded greys of the main city architecture. This is hugely revealing of both a screen's ability to deliver peak saturation colours – especially reds – and its near-dark and greyscale finesse. Blown-out reds in the background bar logo is a common flaw.

The Vegas sequence is presented almost entirely in a strong orange tone that's difficult to make look consistently right. Add in subtle colour blends, swirling smoke and dust, stark light sources and lots of orange-tinted shadow details, and you've got potential TV nightmare fodder. Colour banding, plasticky skin tones, detail loss in misty areas, murky dark areas... all these issues and more may crop up. But when done right, it's a sight to behold. **JA**

Over to you...

HCC readers reveal their demo disc picks



Neil Anderson

'Opening scene to *Unbroken*. Fantastic viewing and one of the best Atmos demos going.'

Arron Dennis

'The last 30 mins of *The Matrix* 4K.'

Wayne Hyde

'I'll tell you what else works well, Atmos music discs where the video is a static picture. You're drawn in to concentrate on the audio only, plus because it's a music track of three/four minutes you're able to take your time to focus on positions of instruments and how the Dolby Atmos mix is presented. Check out INXS's *Kick* and REM's *Automatic For The People*.'

Nick Guy

'*Star Wars: Episode III – Revenge of the Sith*. The opening 20 mins tests any system to the max.'



HANS ZIMMER: LIVE IN PRAGUE

From Gotham to Gargantua

A collaborator with the likes of Michael Bay, Ridley Scott and Christopher Nolan, Hans Zimmer's work should be familiar to anyone with a half-decent Blu-ray collection. His pounding, mesmeric scores have helped define the modern blockbuster, and for this concert, filmed in Prague in 2017, he breaks out some of his most iconic work.

With more than 72 musicians on stage, including orchestra and choir, it looks phenomenal – and it's also a veritable feast for the ears. There's a choice of two soundtrack options, stereo PCM and Dolby Atmos. The soundstage expands dramatically when you select the latter.

The setlist ranges from haunting to whimsical – compare the staccato drama of *Gladiator*'s *The Battle* to the opening theme from *Driving Miss Daisy* – while cuts from the Dark Knight trilogy will have Bat-fans pumping the air. *Why So Serious*, with its thumping bass beat and wall of sound guitars, hits with enough force to realign the topography of your room. When we get to *Why Do We Fall* your heart should be beating in simpatico with the orchestra.

The concert ends with a selection from *Interstellar* and *Inception*, which seem to meld into one long majestic, emotional audio experience. The use of Atmos here is striking. *Half Remembered Dream* opens with an eerie metallic rumble that rolls from front to back.

Even if you thought you knew Zimmer, this live performance offers something new. A more exhilarating Atmos music disc we haven't heard. **SM**

Steinway to Heaven

Daniel Sait eyes up a media/cinema room that mixes high-end audio with dual displays and some superheroic guests

INSTALLATION COMPANY SMC used premium marque Steinway Lyngdorf as the backbone for this multi-purpose room combining lounge and cinema. A lover of action, superhero movies and gaming, the owner wanted to be able to watch TV, but also have a full-size, high-quality projection solution.

SMC's director Robin Courtenay explains: 'In order to provide maximum impact whilst dealing with sub-optimal equipment locations (necessitated by the shape of the room) we had to push the equipment to its limits. Projector, screen and lifts were either at their distance tolerance points or housed in smaller, custom enclosures.'

The front wall is where the magic happens. For much of the time, the 85in Sony 4K TV and Steinway Lyngdorf LCR speakers and six boundary subwoofers are on show, joined by the Caped Crusader and Man of Steel. However, a bespoke reverse-roll projector screen, with custom masking and ambient light rejection, is ready to drop down and become a wall-filling canvas for the cinema's JVC DLA-Z1 laser PJ. Room sources are an Oppo UDP-203 and a Sony PS4.

The projector is set up for different ambient light levels, and the installers have also employed the room correction and custom voicings of Steinway Lyngdorf's P200 processor to adapt to the changing use of the space, for example when the Lutron-controlled blinds are open, closed or when the room is packed for a party. Considering the potency of this setup, it's no doubt a popular place to be... ■

A. Three-dimensional sound

All speakers in the system are from Steinway Lyngdorf (Model S and In-Wall Series), delivering a high-quality Dolby Atmos experience in a 7.6.4 configuration

B. 85in smallscreen?

For everyday TV viewing, the cinema features a wall-mounted 85in Sony 4K HDR LED model

C. Come on down

When the owner wants to go large, a 4.2m-wide projector screen descends in front of the TV and front-wall speakers/woofers

KIT CHECKLIST

STEINWAY LYNGDORF: P200 surround sound processor; Model A1 amplifier; 4 x Model A2 amplifiers; 3 x IW26V in-wall speakers; 4 x Model S15 on-wall speakers; 4 x Model S15 in-ceiling speakers; 6 x dual 12in Model LS boundary woofers
JVC: DLA-Z1 4K HDR laser projector
FUTURE AUTOMATION: Custom projector lift
STEWART FILMSCREEN: 4.27m-wide acoustically transparent drop-down projection screen
SONY: KD-85XD8505 4K HDR TV; PlayStation 4
OPPO: UDP-203 4K Blu-ray player
WYRESTORM: 2 x 4K Point-to-Point extenders
CRESTRON: RMC3 processor; DM receiver
APPLE: iPad Mini running Crestron app
SURGE-X: Surge protection/power conditioner



D. Six-sub system

Occupying left and right on the front wall are triple stacks of Steinway Lyngdorf's 2 x 12in passive Boundary Woofer. The brand's RoomPerfect calibration was employed to fine-tune bass integration with the other speakers

E. Racked and ready

Amplification also comes from Steinway Lyngdorf, with a combination of A1 and A2 models handling the room's 17 channels

F. Touch and go

Simplified control of the AV system and lighting/blinds comes via an iPad Mini running Crestron automation software, in conjunction with racked Crestron hardware

G. Pick a flick

This kit cabinet provides quick access to the cinema's Oppo 4K player and surround processor, and includes space for Blu-rays



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- DLA-N7B

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REVIEWS

→ **HARDWARE** EPSON EH-TW9400 4K HDR LCD projector PHILIPS 55in OLED with HDR10+ and Dolby Vision support SONY Second-generation ES-grade UHD Blu-ray player LG 3.1.2-channel Dolby Atmos/DTS:X soundbar system OPTOMA 1080p HDR projector DALI Katch One soundbar KLIPSCH RP-500SA height/surround speaker & MORE!

LG's bright idea



LG's 65SM9800 combines direct LED lighting with Nano Cell LCD technology. Can it challenge the brand's own OLED sets? See p52...

All prices quoted are approximate and may have changed

HCC RATINGS KEY...

Outstanding	★★★★★
Above average	★★★★
Acceptable	★★★
Disappointing	★★
Dire	★

AV INFO

PRODUCT:
An HDR/4K-capable
LCD projector

POSITION:
Epson's upper mid-
range home cinema
PJ, above TW7400

PEERS:
Epson EH-TW7400;
BenQ W5700

1. Epson's full-size
remote is easy to use
and backlit

2. The lens is
motorized and offers
a 2.1x zoom

Epson's latest upper mid-range projector is worth the extra money, says **John Archer**

Wide colour HDR heroics

Projectors aren't natural bedfellows of today's High Dynamic Range and Ultra HD picture technologies. Happily, though, projector manufacturers haven't just thrown their hands up in despair. Instead, they've steadily been getting better at finding ways to handle content that really they shouldn't be able to – and Epson's new EH-TW9400 is the latest proof of just how far they've come.

This £2,550 model is the big (as in, better specified and more expensive) brother to the previously reviewed EH-TW7400 [see HCC #293]. From the outside, though, the two look pretty much identical. Both are massive by 'mainstream' projector standards, and both feature a large, centrally mounted lens with forward-firing cooling grilles to either side.

The chassis edges are nicely rounded, the bodywork feels robust, and there's a crisp, black finish. You can also buy an EH-TW9400W variant (for £300 extra) that bundles a wireless HDMI connection system.

The connections initially look the same as those on the EH-TW7400. There are two HDMI ports (one of which is 4K HDR ready), two USBs (both 2.0, one for service use only), an RS-232C port, a 12V trigger output, and a VGA computer input.

Closer inspection, though, reveals an additional Ethernet port on the EH-TW9400 to aid integration into home control systems. It also turns out that the 4K HDMI input supports 18Gbps, paving the way for 4K HDR at frame rates up to 50/60Hz. This is a first for an Epson mid-range model, and is welcome now that we have 4K/60p video gaming and 50/60Hz live 4K HDR broadcasts/streams.

The projector also has these 4K HDR broadcasts in mind with its support for the HLG HDR format. This is another improvement over the EH-TW7400, which only caters to the industry standard HDR10 platform.

It's a punchier model, too, with a claimed peak brightness of 2,600 Lumens versus the 2,400 figure of the EH-TW7400. The claimed contrast ratio is also boosted to six times higher.

Turning to similarities between the two units, both feature motorised lens control with an impressive 2.1x optical zoom. There's also plenty of fine focus control, and both vertical and horizontal image shifting.

HDR tweaks

The EH-TW9400 claims to cover the full DCI-P3 colour spectrum used in commercial cinemas. As with BenQ's similarly wide colour-capable W2700 and W5700 models [see HCC #299 and #300 respectively], delivering so much colour range requires the projector to introduce a colour filter that substantially darkens the picture.

Epson provides, however, a simple but effective HDR adjustment that lets you trade brightness against dynamic range across 16 different settings. The extremes of this setting are pretty unusable, but moving plus or minus four from the 'eight' default level can be helpful for tweaking HDR images to suit different room setups and image tastes. Or, actually, for adapting the projector to different HDR content, as I'll discuss more later.

There are also (largely unnecessary) sharpness and detail boosters, plus standard and MPEG noise reduction filtering for sub-4K sources. And it joins the EH-TW7400 in supporting 3D if you cough up for some of Epson's optional active shutter glasses.

Gamers will be pleased to discover the EH-TW9400 suffers under 30ms of input lag, regardless of whether you're using the projector's Fine or Fast image processing settings.

The one controversial aspect of the specifications is its 4K resolution. As usual for





3 a sub-£5,000 projector, it doesn't carry a native 4K resolution. Its imaging chips are actually only 1,920 x 1,080 Full HD. Instead, it divides 4K pictures into two marginally offset images and drives each pixel twice per frame, to create a 4K effect.

'I think I will have seen everything...' Control of the EH-TW9400's lens/shift features is via a likeably large and hefty remote control that gives its backlit buttons plenty of room to breathe. It also provides direct access to lots of useful image features, including the key HDR Setting tweak.

The new 4K Blu-ray release for Tim Burton's *Dumbo* (reviewed next issue) features a gorgeous HDR, wide colour picture mastered to 4,000 nits – enough to strike terror into the heart of any affordable projector. Yet with a little careful adjustment, the Epson actually coped with it rather well.

The main changes to make were choosing the Digital Cinema mode (which brings in the colour-expanding filter), upping the power output to High, and then reducing the HDR Setting to five (which actually increases baseline brightness) to stop the image appearing too dark. With this done, the results are often gorgeous.

Particularly striking is how intense but also refined the film's bold, stylised colours are. Epson's claims of DCI-P3 coverage are credible, as the projector delivers everything from the dazzling pinks and reds of a whimsical sunset or the gaudy neon lighting of Vandevere's Dreamland theme park, to the endlessly subtle tones in *Dumbo*'s dimly lit footage of the circus audiences.

It can't rival the colour volume of a good HDR TV, simply because (as with all PJs) it can't get as bright. But provided you tweak the HDR Setting as suggested, the EH-TW9400 runs brighter than I'd have expected with its wide colour filter in place.

As a result, HDR pictures are excellent for a relatively affordable model. For instance, spotlights in the circus have

a brightness hit to them that exposes the flatness of the SDR version of the film. There's a sparkle to the sequins on Colette's costumes, and daylight sequences show that the projector can hold on to its brightness even when there's a whole frame of it to deal with.

A caveat is that black levels aren't quite as deep once you've upped the brightness for a more satisfying HDR picture, as they are using the projector's presets. There's greyness over some dark *Dumbo* sequences, such as those in the Nightmare zoo. But its black level response can still be considered good in the context of such an all-round punchy HDR experience. If you want significantly better black levels with HDR material, you're looking at a big step up in price to models like JVC's £6,500 N5.

While I'd recommend a user-defined Digital Cinema mode setting for dark-room viewing, the



EH-TW9400's flexibility with HDR sources means that if there's ambient light in your room, or you find a particular title just too dark for comfort, then Epson's Bright Cinema and Cinema settings both offer an excellent compromise. Colour saturations and black levels are reduced (considerably and slightly, respectively) in return for a much brighter finish. This sort of choice is, for me, essential on an HDR PJ.

The only frustrating thing about the EH-TW9400's HDR flexibility is the extent to which you have to use it.

'The EH-TW9400 offers an all-round punchy HDR experience... colours are intense but also refined'

For instance, while calling up the HDR Setting to boost the baseline brightness works well for *Dumbo*, with *Pan* – another 4,000-nit 4K Blu-ray – this setting causes substantial clipping and desaturation of some of the film's bright highlights, such as the sun hanging above Neverland as Peter arrives there on the flying ship.

This might lead you, on occasion, to wanting to pause a film to fiddle with the HDR Setting. This is hardly ideal, but there's no sign yet of any projector – certainly at this price – being able to adjust itself on the fly.

The *Dumbo* UHD disc is detailed enough to reveal that the EH-TW9400's 4K images aren't as crisp and textured as those of native 4K projectors, or some of the best-quality pseudo 4K DLP models I've auditioned. They are, though, a substantial notch above standard HD, and have their sense of density and detail enhanced by a freedom from any sort of noise. Most obviously, there's none of the rainbow effect of DLP designs. And the fluid camera sweeps on show throughout *Dumbo*'s Dreamland destruction sequence all look natural, with no excessive juddering or blur.

It's worth saying, too, that my EH-TW9400 sample didn't suffer significantly from RGB convergence errors to leave parts of the picture looking unfocused.

While you'll want to feed the PJ as rich a diet of 4K content as possible, it's solid with SDR HD Blu-rays



SPECIFICATIONS

3D: Yes. Active shutter (glasses optional) **4K:** Yes. PRO-UHD 4K Enhancement method **HDR:** Yes. HDR10; HLG **CONNECTIONS:** 2 x HDMI inputs (one 18Gbps/HDCP 2.2); Ethernet port; 2 x USBs (one service only); 12V trigger; PC port; RS-232C **BRIGHTNESS (CLAIMED):** 2,600 Lumens **CONTRAST (CLAIMED):** 1,200,000:1 **ZOOM:** 2.1x **DIMENSIONS:** 520(w) x 193(h) x 450(d)mm **WEIGHT:** 11kg

FEATURES: 3LCD projector; 5,000-hour claimed lamp life in Economy mode, 3,500 hours otherwise; 24dB max quoted fan noise; Wide Colour filter mode with DCI-P3 support; 1.35-2.84:1 throw ratio; vertical lens shift (+/- 96.3 per cent); horizontal lens shift (+/- 47.1 per cent); 300in maximum image size; motorized lens and focus; 10-position lens memory; frame interpolation; ISF certification

PARTNER WITH

EPSON ELPMB30: For permanent residency in your movie den, mount the EH-TW9400 projector to your ceiling with Epson's low-profile mount. Available for £115, it comes with a white cover plate to blend in with your room decor.

too, resolving impressively deep black levels, the sort of colour tone finesse it's easy to forget that SDR is actually capable of, and 'upscaling' HD to pseudo 4K cleanly and effectively.

You can choose to turn off the 4K setting with HD and bring in Frame Interpolation instead (this latter option isn't available with 4K sources). But I didn't see much benefit in either of these options.

Thanks to a pair of Epson active shutter glasses lying around in my cinema room, I was able to take the unit's 3D pictures for a spin. And the results were excellent.

The 3D effect is convincing, delivering a great sense of depth and space while limiting crosstalk ghosting noise to only the most extreme image content (such as bright text on a dark background). The picture retains sufficient brightness and detail levels are high (although 3D playback is, as expected, restricted to Full HD). Motion avoids that juddery or sickly look sometimes associated with 3D, and I wasn't aware of any flickering effect from the glasses (so long as you're viewing in a dark room). Finally, the experience wasn't the least bit fatiguing. If only 3D had always looked this good.

Time and money well spent

The EH-TW9400 delivers its impressively bright, contrast-rich and colourful images without suffering excessively with either heat or fan noise. Some will want the sharper 4K impact of XPR DLP and native 4K rivals, but the only serious issue I can really find with it is the ongoing effort required in always getting the best out of its considerable HDR talents, with the myriad of radically different content that's out there. Invest some of your time, though, and it can be made to sing with almost anything you care to throw at it. And that's what matters most ■

HCC VERDICT ★★★★★

Epson EH-TW9400
→ £2,550 → www.epson.co.uk

WE SAY: This mid-range projector needs a bit of TLC to always get the best out of it, but the results are good enough to more than make the effort worthwhile.

Mark Craven enjoys this soundbar's can-do attitude with Dolby Atmos and DTS:X Blu-ray mixes

LG's aiming high

As noted at this year's IFA GPC [see p22], the soundbar market is surging. There's plenty of choice too, from budget models to Dolby Atmos power pushers. LG's SL8YG is one of the latter – a £700 soundbar/sub combi with cinematic immersion on its mind.

It's mid-range, and not LG's biggest offering in 2019. That would be the SL10YG, a 5.1.2-channel design. This smaller sibling does away with side-firing drivers for a 3.1.2

implementation, and offers a cash saving of up to £500. Considering you can still add LG's SPK8 wireless surround speakers as an optional extra for £150, and get a native five-channel flatbed, you might consider this 'bar the better option.

Sandwiched between is the SL9YG, which doesn't offer a centre channel but retains the surround drivers for a 4.1.2 effect.

Once again this year LG has roped in UK sound brand Meridian Audio for collaboration on its home cinema products, only we're told the relationship runs deeper than before, beyond mere sound-tuning. New is Meridian Upmixer, designed to tailor stereo music content to the bar's three-channel presentation.

While price will effect what LG soundbar you might plump for, so will size. The SL8YG is, at just over a metre wide, targeted at TVs beginning at 49in. That's not to say it doesn't have the attributes to join a larger set.

The 'bar looks much like LGs of yore, with its twin upfiring drivers prominent on the left and right ends of a grey chassis with wraparound mesh grille and round edges. A front LED display sits to the right of centre (because that's where the centre channel driver is).

The front channels each get a tweeter and midbass, while the Atmos units are single full-range 2.5in affairs.

Power is rated at 440W, but this includes the 220W built into the wireless subwoofer. LG's bassmaker features a 7in front-firing woofer (ported to the rear) and looks a little more nondescript, with three sides covered in black cloth and a blank, grey top plate. It feels a little less solid and well put together than the 'bar, too.

The G appending the soundbar's model number denotes it integrates Google Assistant, allowing it to be used to control other Google gadgets in your home. There's also Google Chromecast and Bluetooth provision.

The handset is mid-sized, with large keys for volume, function (source) and mute. You'll also find a key to cycle through sound modes – Movie, Music, ASC, Standard and Bass, plus channel level control, which is useful to boost the centre or overhead channels.

Physical hookups are one HDMI input (with 4K HDR passthrough including Dolby Vision) and an HDMI (ARC) output. There's also an optical input and a USB port.

Familiar feel

It doesn't take long listening to the SL8YG before I'm revisiting my notes on LG's SK10Y [reviewed in HCC #288]. It seems to plough the same furrow, in that it has a big, bold confident sound with plenty in the tank for largescale moments. It's very much a crowd pleaser.

Chapter 6 of *Jurassic World: Fallen Kingdom* (Blu-ray, DTS:X) begins with army trucks trundling across Isla Nublar before our hero Owen (Chris Pratt) surveys the volcanic rumblings. The noise of the vehicle engines pans across the SL8YG's LCR stage, while the 'quake ruptures pleasantly (if a little subtly) from the woofer.

More distinct details come across well. As the team enters the old complex HQ, the tap of a door keypad has electronic sparkle, while the scratch of cables being plugged in or the whine of old lockers being opened are clean and well-projected.

And there's a nice scale to its native DTS:X presentation. The sound is deep and vertical to a point. Later in the

AV INFO

PRODUCT:
3.1.2-channel Dolby Atmos/DTS:X soundbar

POSITION:
LG's entry-level 3D audio 'bar, above DTS Virtual:X models

PEERS:
Samsung HW-Q70; Sony HT-ZF9

1. Front-firing L/C/R drivers are joined by twin upfiring

2. The small, plastic remote offers Sound Effect and EQ keys



**SPECIFICATIONS**

DRIVE UNITS: 3 x 0.75in soft dome tweeters; 3 x 1.5in x 4in midbass drivers; 2 x 2.5in upfiring units **ONBOARD POWER (CLAIMED):** 440W total **CONNECTIONS:** 1 x HDMI input; 1 x HDMI output (ARC); optical digital audio input; USB **DOLBY ATMOS/DTS:X:** Yes/Yes **SEPARATE SUBWOOFER:** Yes, 7in driver, ported **REMOTE CONTROL:** Yes. **DIMENSIONS (SOUNDBAR):** 1,060(w) x 57(h) x 119(d)mm **WEIGHT (SOUNDBAR):** 4.4kg

FEATURES: Dual-band Wi-Fi; Meridian technology; 24-bit/96kHz upsampling; Standard, Movie, Music, Bass Blast, ASC sound presets; Google Assistant built-in; AV sync; channel level control; wireless rear speakers (optional)

PARTNER WITH

PANASONIC DP-UB450: With this new-for-2019 Ultra HD deck, Panasonic has lowered the entry price of Dolby Vision and HDR10+ disc playback to a tempting £250. The compact design makes it easy to accommodate too.

3

chapter, when Owen enters the jungle in search of Blue, he pauses as a flock of dinobirds pass overhead. The effect is clearly that of height, albeit ahead of me.

Later still the Isla Nublar volcano erupts and havoc ensues. Claire and Franklin are trapped as dust falls from the control room ceiling – a distant voice shouts 'let's get out of here!'. Michael Giacchino's score rises in tension with brassy stabs. It's a nice smorgasbord of sound that the LG serves up with panache and a pleasingly warm tone.

Dialogue is always clear, whether it's the deliberately gruff ramblings of Ben Affleck's Batman (...*Dawn of Justice*, Blu-ray) or the more dulcet tones of ...*Fallen Kingdom*'s Bryce Dallas Howard.

Fallen Kingdom's Indiana Jones-inspired volcano fleeing scene (Chapter 8) gives the 'bar more chance to show off its height presentation and LFE handling, as lumps of molten lava plummet to the ground and towering dinosaurs romp past. One crashes through a fallen tree with an almighty thwack; LG's wireless sub brings the required depth.

Something different

Reflected sound is a tricky business. It's not only about the 'bar, but where you place it and the attributes of your room. As I'd expected, a run through of Dolby's Atmos demo clips from a test disc finds the SL8YG failing to fully envelop when used in my living room (which has standard height ceilings). I'd expect the trick to be better with additional rears, of course. The falling rain of the *Amaze* trailer is better delivered than the more precise bird-flapping-its-wings flypast. Yet it's still able to pan and steer effects with

4



distinction, and has an immersive feel that eludes two-channel products. It's not the 5.1 discrete home theatre of old, but something different.

The soundbar offers much more user control when a non object-based track is in play. With such sources, my advice would be perhaps to skip the ASC (Adaptive Sound Control) and Standard presets and switch to Movie or Bass Blast. Movie increases the projection and scale of the soundstage, while the latter largely does as advertised.

All of the presets can be played with a Surround mode on or off (although activating this is convoluted, as it involves a three-second press on the remote's EQ key – a dedicated button would have been more sensible). This brings the upfiring into play with stereo signals on all presets. If you want native two-channel playback (without the centre channel or upfiring), use the Music, Standard or ASC modes with Surround off.

Edge of Tomorrow's DTS-HD MA mix sounds undernourished in Standard Mode; a bit congested and unexpansive. As the troops banter on the dropship and then plummet into the beach battle chaos, there's strong dialogue and effects, but it lacks verve and body. Introducing Bass Blast or Movie is like (to borrow an audiophile phrase) lifting a veil. Only in this case it's more like lifting a heavy curtain.

A friend of 4K BD

Juggling the SL8YG's sound modes and finding its best position make it not quite plug-n-play, but that shouldn't detract from an overall enjoyable performance, while DTS:X and Dolby Atmos ployout, plus 4K HDR passthrough, make this a solid partner for a UHD disc collection. There's strong competition from Samsung, Sony and others at this price, but LG's system does enough to be worth an audition ■

HCC VERDICT**LG SL8YG**

→ £700 → www.lg.com/uk

WE SAY: This system's 3.1.2 presentation doesn't fully envelope, but still appeals. Sound delivery is energetic and full-range. Make sure to experiment with the sound presets.

3. When siting the sub, gives its rear port space to breathe

4. Use the bar's HDMI input, or route sources through your TV and ARC

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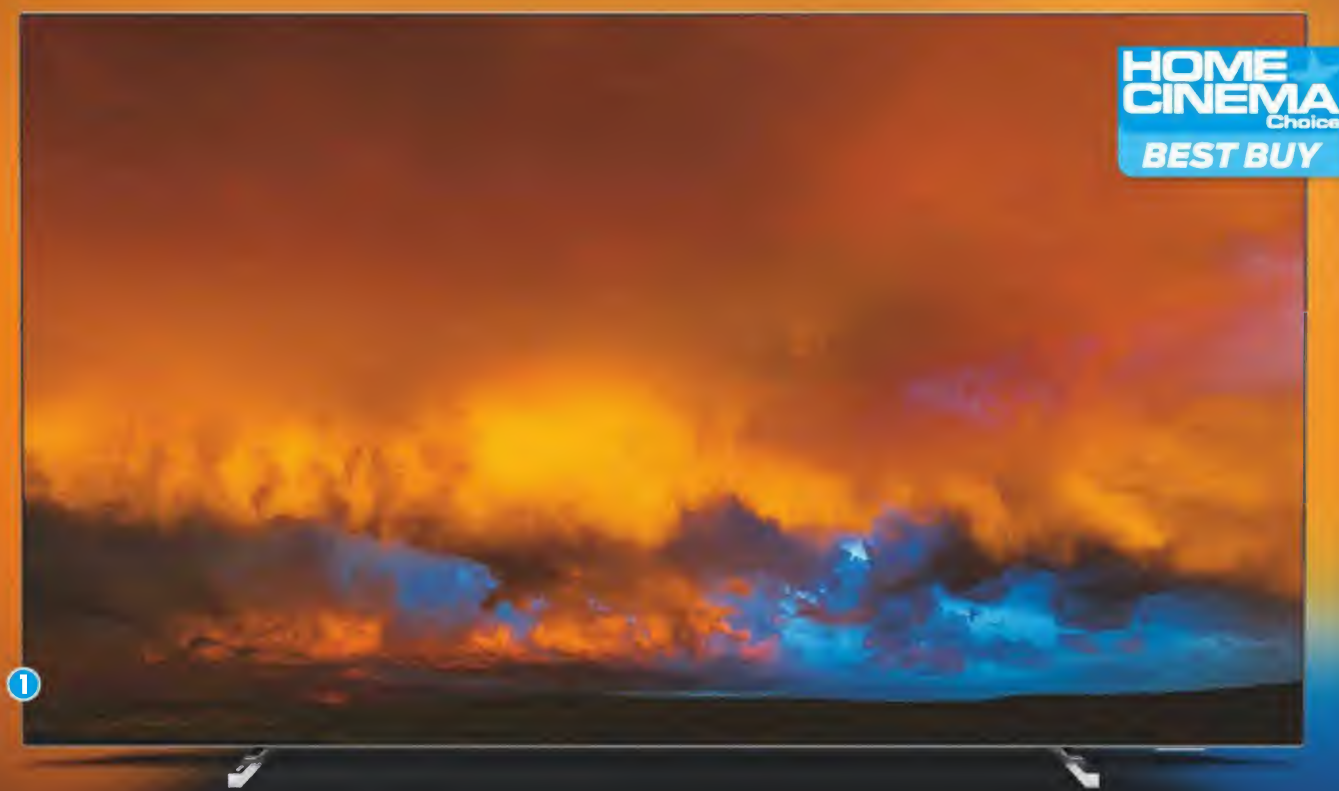
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Philips puts consumers first with its latest and greatest OLED TV, says **John Archer**

What format war? asks Philips OLED

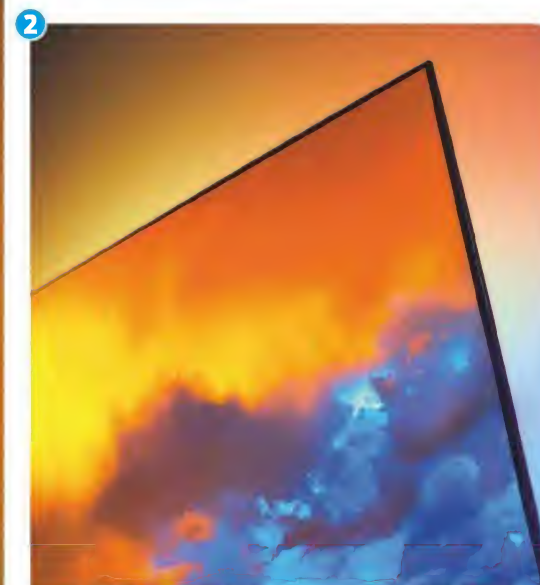
With their combination of a sleek, Ambilight-enhanced design, competitive pricing and uniquely punchy pictures, Philips' award-winning 2018 OLED flatscreens were hard to resist. That hasn't stopped the brand from taking things up another gear with its 2019 models, though.

The first improvement that stands out on the new 55in 55OLED804 is Dolby Vision compatibility. This would be welcome on any TV, but it's given extra significance here by

the fact that Philips has also supported the rival HDR10+ format since last year.

Dolby Vision and HDR10+ are dynamic HDR variants that add extra scene-by-scene data to help TVs deliver more accurate images. Yet Philips is the only brand, bar Panasonic, accommodating both systems, meaning 55OLED804 owners will always get the best picture quality a stream or 4K Blu-ray has to offer, no matter what format it's mastered in. It'd be a boon if all TV brands would take such a consumer-facing, format-neutral approach.

Philips has also further upgraded its already powerful P5 picture processing engine. This introduces a whole



1. For its 2019 range, Philips has added Dolby Vision to HDR10+

2. The set features three-sided Ambilight illumination

3. Smart skills come via Android Oreo

4. The feet are slim but provide a sturdy foundation

second processing chip's worth of extra power, and improvements to three of the five picture 'pillars' that give P5 its name.

For starters, Philips' Perfect Natural Reality (PNR) system for converting standard dynamic range images to HDR now supports specular detection (for picking out and emphasising bright spots of light); region classification (to localise the way the HDR upgrade is applied); and skin tone protection (so that skin tones are detected and preserved during PNR's colour-widening process).

The revised P5 processor brings new detail protection and restoration features too, as well as a system for removing jaggedness from angled lines. This all adds up to more apparent detail and image depth.

Tweaked noise reduction systems, says Philips, now reduce contouring and deliver more intelligent bit-depth calculation, while new 'sparse filtering' stops noise reduction generating unwanted side effects such as softened motion sharpness.

And there are also some improvements specific to playback of native HDR content. Namely better reproduction of shadow detail in dark areas (which at times appeared rather crushed on last year's models); enhanced colour and contrast; brighter light peaks; less banding noise over fine colour blends; and less detail loss in the brightest parts of aggressive HDR images.

Slim and trim

The 55OLED804 looks gorgeous. The screen is surrounded by a minimalist dark frame, offset by an attractive metallic outer trim. It sits low on a pair of chrome bar feet, while most of the panel's rear is sensationally slim and beautifully finished in brushed metal.

This classy design is boosted by Ambilight, which casts coloured light from three of the screen's sides to create a relaxing and immersive experience (but do reduce the light's intensity slightly from its default setting).

Audio comes from a 2.1-channel array with tweeters and midbass joined by a rear-mounted woofer. This will hopefully see the 55OLED804 get mileage out of the built-in Dolby Atmos decoder Philips has added this year.

The set's remote features a reasonably logical layout, direct buttons for Netflix, Rakuten and voice search, and a full QWERTY keyboard on the back – although the need for this is reduced by built-in Google Assistant voice recognition (Amazon Alexa is also supported via external devices).

Smarts on the 55OLED804 come courtesy of Android TV. The latest Oreo version improves over previous generations, particularly relating to customisation options and the emphasis given to video services. Amazon Video, Netflix, Rakuten, BBC iPlayer, GooglePlay Movies, and YouTube are all present and correct. While the ITV Hub

AV INFO

PRODUCT: 55in OLED with Dolby Vision and HDR10+

POSITION: Philips' entry-level 2019 4K HDR OLED TV

PEERS: LG OLED55C9; Sony KD-55AF8; Samsung QE55Q85R

suddenly appeared during my time with the TV, Android still doesn't support the All4 or My 5 catchup TV services. And I still find the system frustrating. The home page takes over the whole screen and won't let you return to what you were watching simply by pressing the Back key. It runs relatively stably on Philips' TVs, though.

Superior images

The 55OLED804's pictures instantly look superior to those of its predecessor. Thanks, chiefly, to some extra precision and control. This is at its most obvious when it comes to contrast. As revealed during the tough sequence in Sapper Morton's kitchen near the start of *Blade Runner 2049* (4K Blu-ray), this new Philips does a better job of retaining subtlety in shadowy areas, like the shaded half of K's face, and the unlit corners of the room. The improved specular highlight system is also evident in the shot where K's Spinner flies towards Morton's abode, as tiny lights on a distant hillside glimmer with intensity and precision.

Without being able to do side-by-side comparisons, I'd say that baseline brightness levels with HDR content seem slightly lower than they were on the 2018 OLED803 [see *HCC* #289]. However, refinement in the darkest and brightest parts of the picture lead to a more consistent, natural and dynamic-feeling image. It's a similar situation with colour. There's less banding – pretty much zero, in fact – in tricky shots such as the dusk beach scene in *Exodus: Gods and Kings* (4K Blu-ray), or the ultra-bright white clouds throughout the UHD BD of *Pan*. This produces a more precise look to shading and blending, even if outside of Philips' Vivid preset colour tones don't always feel as flat-out intense as they did last year. For much of the time the aforementioned Vivid mode delivers the most eye-catching, punchy pictures. But it can go too far at times. Extreme content, such as the sun-drenched clouds when Peter arrives in Neverland, looks clipped and blown, while the sand in *Mad Max: Fury Road* (4K BD) can appear almost like it's been painted orange. There are tools to help you calm the Vivid mode down, but other presets offer outstanding results with a near-



perfect balance of dynamism, subtlety and consistency. And noticeable in all of them is the impact of Philips' new skin tone processing, which gives faces a more believable and refined look. There's a better handling of noise too. Skies above *Mad Max: Fury Road* no longer have a distracting fizzy feel. This is true even without using Philips' noise reduction system, although I'd suggest you can set this to Minimum without having to worry about unwanted side effects.

Let's get dynamic
The 55OLED804's enhanced image precision versus 2018's models is underlined by its Dolby Vision and HDR10+ support. These both bring subtle improvements to dynamic range and, in Dolby Vision's case, colour refinement.

'Keenly priced and offering refined 4K HDR images – Philips has again struck gold with the 55OLED804'

Unexpectedly, the TV is able to apply some of Philips' own video tweakery to Dolby Vision images, rather than the Dolby mode disabling TV processing, as it usually does. Dolby Vision Bright retains Philips' source analysis, sharpness enhancement and motion processing systems. The Dolby Vision Dark preset turns off all the Philips processing if you prefer. If you do plump for the Bright mode, I'd recommend switching motion processing from Standard to Movie, as Standard does generate artefacts. With my reference Oppo UDP-205 4K Blu-ray player, dark Dolby Vision scenes appeared on the 55OLED804 with strangely elevated black levels. Yet switching to a Panasonic DP-UB820 resulted in no such problems. In fact, with this deck Dolby Vision delivered just the sort of extra dynamism (deeper blacks, punchier peaks) I'd hope to see. Philips is investigating the Oppo Dolby Vision issue, but hadn't confirmed a fix by the time we went to press. The TV's brightness on a white 10 per cent HDR window in HDR Personal mode measured 750 nits briefly, before

SPECIFICATIONS
3D: No **4K:** Yes, 3,840 x 2,160 **HDR:** Yes, HDR10; HLG; HDR10+; Dolby Vision **TUNER:** Yes, Freeview HD **CONNECTIONS:** 4 x HDMI inputs; 2 x USB; Ethernet; headphone output; digital optical audio output **SOUND (CLAIMED):** 50W, 2.1-channel **BRIGHTNESS (CLAIMED):** N/A **CONTRAST RATIO (CLAIMED):** N/A **DIMENSIONS (OFF STAND):** 1,228(w) x 705(h) x 49(d)mm **WEIGHT (OFF STAND):** 22kg
FEATURES: 3rd-gen P5 processing; USB multimedia playback; three-sided Ambilight; Eco mode; Android TV, Google Assistant/Chromecast built-in; works with Amazon Alexa; Dolby Atmos audio; HDMI auto low latency mode; Perfect Natural Reality

PARTNER WITH

RAKUTEN TV: If you don't fancy the monthly fee of Netflix or Amazon, Rakuten's pay-per-view (buy or rent) platform might suit. The content range includes film and TV, with Dolby Vision and Dolby Atmos sometimes available.

dropping to around 640. In Vivid mode it hits nearly 900 nits, settling down to around 770. In HDR Movie mode, the set is stable at 650 nits. While I'm talking measurements, input lag over HDMI was less than 15ms when using the TV's Game picture preset. This is about as good as TVs get. Away from 4K HDR, the set's processing works wonders on standard dynamic range/HD content. Detail levels approach those of true 4K, without exaggerating noise or adding grittiness. The Perfect Natural Reality HDR conversion system, meanwhile, introduces a nicely judged increase in an SDR picture's brightness range without excessive or yellowy white peaks or black crush. So while I understand the purist appeal of leaving SDR images relatively untouched, I think you'll struggle to live without PNR once you've tried it. Again I'd suggest sticking with the Minimum setting, though. Where this TV falters is with its audio. In the plus column there's an impressive amount of detail and scale to the soundstage, especially if you call in the (off by default) Dolby Atmos height option. And vocals sound surprisingly clear for a TV with no forward-firing speakers. A lack of bass leaves its delivery feeling a bit thin, however – even to the point of harshness with some settings or very dense mixes. Add an external sound system if you can.

Giving you what you want
Accepting this caveat (and my gripes about Android TV), I'd say Philips has again struck gold with the 55OLED804. It's keenly priced, offers slightly less aggressive but much more refined pictures than its predecessors, has Ambilight and Philips' processing power to set it apart from OLED rivals, and, best of all, its support for both HDR10+ and Dolby Vision shows an admirable desire to give AV fans what they want. Impressive ■

HCC VERDICT

★★★★★

Philips 55OLED804
→ £1,800 → www.philips.co.uk

WE SAY: While its sound is only fair to middling, the 55OLED804's pictures are stellar – and the dual HDR10+ and Dolby Vision support is a huge attraction.

5. Want to give SDR images a boost? Call up Philips' Perfect Natural Reality processing





Can DALI Katch up with soundbar rivals?

The loudspeaker specialist enters the TV audio market with an expansion of its Katch product line. Yet **Mark Craven** finds it hasn't left its musical roots behind

AV INFO

PRODUCT:
Two-channel
soundbar with
Bluetooth/HDMI ARC

POSITION:
Sibling of the DALI
Katch speaker

PEERS:
Bluesound Pulse
Soundbar 2i;
Harman/Kardon
Enchant 800;
Sonos Playbar

FIRST CAME DALI'S Katch speaker, an active desktop model [see HCC #295] that outperforms much of the competition around its £300 price point and combines its sonic articulation with some cool Danish design. Now the brand has launched the Katch One, which – looks-wise – takes the concept of the Katch and scales it up to create a soundbar.

Of course, the price is also scaled up, to £650. DALI's 'bar isn't partnered with an external subwoofer, nor does it pay any heed to Dolby Atmos/DTS:X, so it will have to justify that outlay on sound alone.

And style, actually. DALI is highly regarded for the aesthetic beauty of its speakers, and the Katch One continues the trend. It doesn't look like a typical one-box TV audio booster. It stands vertically, with circular chassis ends that mirror the original Katch, and proffers an acoustically transparent fabric grille that's a tonal match to whatever design finish you go for (the choices are Iron Black, Mountain White and Ivory White).

Buttons on the top of the Katch One cover power, source, volume and settings, while status lights denote

which source is in play – depending on how high the 'bar is installed, these might not be visible.

A small remote offers the same functionality. I found this fine to use (although there's an abundance of volume steps), and had no trouble also controlling volume via a TV remote when the Katch One was connected by its HDMI ARC port – other connections on the recessed



back-panel are a USB (for powering devices and service, but not media playback); a subwoofer pre-out; 3.5mm analogue input; and (unusually) two optical audio inputs – one is designed to auto-power on when the carrier light from a TV is detected; the other is for audio devices (a CD player, for instance) that don't turn off the carrier light when in standby, so instead will auto on/off based on audio signal detection. Additionally, the Katch One offers aptX Bluetooth streaming from compatible devices.

Missing is an HDMI input, although its omission isn't completely unusual and the Katch's target buyer probably doesn't care. There's no Chromecast or Wi-Fi support either.

The Katch One has wall-mount fixings for DALI's funky leather straps (pictured above). It's also supplied with cylindrical wooden feet that attach to the bottom.

Ten into two

The soundbar spreads a total of ten drivers across its stereo array. Each channel gets a single 0.75in soft dome tweeter and pair of 4in midbass units; there are also four further passive radiators to tune the bass response. An active DSP-based crossover works in tandem with

'As giant Kaiju battle massive Jaegers, high-frequency crackles and smashes have a nice attacking edge'

DALI's 4 x 50W Class D amplifier implementation, with a dual transformer design enabling, we're told, low standby power and sufficient headroom 'to handle the power requirements if the amplifier is kept high.'

So there's more going on behind the scenes than you might expect, but how does it sound when sat in front of it? Well, first of all, it does a fine job of making all but the most potent of TV speaker systems sound incoherent and under-powered. The front-firing drivers create the sense of an uninhibited soundfield; the Katch One lends space – and impressive stereo imaging – to film soundtracks, always sounding composed and clear.

And it's nuanced, too, with a believable mid-range that makes even the yawnsome score of Clint Eastwood flick *The Mule* (Ultra HD Blu-ray, see p85) enjoyable, and voices well defined.

For something more aggressive, I spun up *Pacific Rim* (Blu-ray). This finds the Katch One in good voice, presenting a well-balanced and transparent-feeling soundstage. As giant Kaiju battle equally massive Jaegers, high-frequency crackles and smashes have a nice

SPECIFICATIONS

DRIVE UNITS: 2 x soft dome tweeters; 4 x woofers; 4 x passive radiators

AMPLIFICATION (CLAIMED): 4 x 50W Class D

CONNECTIONS: 2 x optical digital audio inputs; HDMI ARC input; analogue stereo minijack input; USB (powered); subwoofer output

DOLBY ATMOS/DTS:X: No/No

SEPARATE SUBWOOFER: No


REMOTE CONTROL: Yes

DIMENSIONS: 860(w) x 142(h) x 64(d)mm

WEIGHT: N/A

FEATURES: Bluetooth (aptX); 24-bit/192kHz DSP; leather strap wall-mounts and wooden feet supplied; Wide and Focused 'Sound Imaging Modes'; HDMI CEC; Iron Black/Mountain White/Ivory White finishes

PARTNER WITH



SAMSUNG QE55Q70R:
Match DALI's glam soundbar with Samsung's slim-bezel midrange QLED TV. Available for £1,400, the direct LED lit 55in QE55Q70R incorporates the brand's Ambient Mode, allowing digital artworks to be displayed when in standby.

attacking edge. Ramin Djawadi's orchestral score is rich and triumphant.

But it's at this point I did find myself hankering for more thrust and energy to the Katch One's delivery, and a dollop more bass presence. The stomping feet of *Gipsy Danger* hit the ground with tangible weight, and bass is precise rather than boomy. But at this price you might expect more, and more projection to really nail the film's OTT action.

A button on the remote looks like it might be for EQ adjustment, but only switches between two sound modes – Focused and Wide. The latter became my permanent choice with movies/TV. A lot of the time (in *The Mule*'s quiet dialogue-driven scenes, for example) its impact is minimal/unnoticeable, but when there's an effect it can latch onto, it becomes more apparent. It's not a virtual surround mode. Rather, it's a gentle expansion of the soundstage. When listening to music, however, I opted for Focus, as the effect of Wide was obvious on well-known tracks.

As a sister product to the Katch speaker, it's clear DALI believes this soundbar will also have music duties to perform. Used for Bluetooth streaming, its clarity and even handling of lows and highs makes it easy to put on a Tidal/Spotify playlist and just enjoy it. The delicate guitar licks in Lynyrd Skynyrd's *Swamp Music* were distinct above the track's undulating basslines, although *Junior B* by Yello, with its breathy female vocal and ethereal instrumentation, had it sounding its best.

From a pure performance perspective, the Katch One suffers against the likes of Bluesound's Pulse Soundbar 2i [see HCC #300], which introduces integrated music streaming via the Bluesound app, potential for multiroom and home cinema expansion, and a fuller, more aggressive sound, albeit for £150 more. On the other hand, the Bluesound 'bar looks like a railway sleeper and dominates any room it's installed in. This is far sexier, and might be just what you're looking for ■

HCC VERDICT

★★★★★

DALI Katch One

→ £650 → www.dali-speakers.com

WE SAY: The Katch One scores points for style, soundstage clarity/precision and ease-of-use, but there are rivals around that add more features and slam.

1. The Katch One looks a lot like the Katch – only bigger
2. LEDs around the volume dial denote level, or flash when the 'bar is muted
3. DALI turns its wall-mount kit into a style statement

**EARTH
ANGEL**

Terry Pratchett's
Good Omens
brings laughs
to VOD, p94

Mark Craven discovers if LG can conjure cinematic thrills with its flagship LCD TV

Overshadowed by OLED?

Such has been the success of LG's OLED TV lineup that it's easy to forget the brand also sells LED-lit LCD TVs. The 65SM9800PLA is a 65in 'Nano Cell' model positioned as a high-performance alternative to one of its pricier self-emissive siblings, offering many of the same feature tricks, but perhaps delivering brighter, more value-for-money visuals.

One thing it hasn't got is quite the same sense of style. The ultra-slim bezel (dubbed Nano Bezel, natch) with tiny chrome trim is sleek, but the TV sits on a crescent stand that doesn't quite seem best designed to take its weight or considerable size.

Nano Cell is essentially LG's QLED rival, where nano particles are deployed to absorb extraneous light wavelengths and boost colour production. The technology is here used in conjunction with an IPS panel (for a wide viewing angle) and direct LED backlighting. Step down LG's Nano Cell TV range to the mid-tier SM86 series and you'll find an edge LED engine being preferred.

The 65SM9800PLA joins LG's 2019 OLED TVs by offering HDMI 2.1 connectivity, including support for eARC and Instant Game Response (Variable Refresh Rate and Auto Low Latency Mode features). The set also supports Dolby Vision HDR playback (but not HDR10+) and Dolby Atmos. For processing, it packs LG's second-generation Alpha 7 AI processor, which shares similarities with the OLED-specific Alpha 9, including improvements to tone-mapping and an expanded colour LUT (Look Up Table).

The smart interface is provided by LG's WebOS 4.5 system. I still find WebOS a bit of a mixed bag. Visually, it's neat and tidy, and the customisable launcher bar and video-on-demand app provision (Freeview Play handles UK catch-up) is excellent. However, operation can become a bit of a faff. LG's Magic Remote takes a while to get used to, and instigating changes via the menus and sub-menus doesn't always feel intuitive – a fact made worse by the number of options available/unavailable depending on the source or mode selected.

Sound options are a good example of this. The TV sports a 2.2-channel speaker array rated at 40W, and from the basic side-bar menu you can choose from Standard, Cinema, Clear Voice, Sports, Music and Game presets.

However, enter the Sound option within the wider Settings arena and you can call upon AI Sound for 'virtual 5.1' surround, or introduce Dolby Atmos – do this and the Ultra Surround Mode changes to Dolby Surround for non-Atmos sources. On top of that, there's LG's One-Touch Sound Tuning mode, which aims to optimise the performance based on a short measurement of your room, with Bass Boost and Treble Boost tweaks available.

The upshot of all this is that the TV seems unnecessarily complicated from an audio perspective – my preference was to always have Ultra Surround or Dolby Surround on, as it effectively opens up the soundstage and sounds agreeable. There's sufficient bass to the thwacks and gunfire during *Fast & Furious 7* (UHD BD), although top-end details lack sparkle.

Tweaker's delight

When it comes to imagery, you get the usual plethora of presets (including ISF Bright/Dark, and a Technicolor Expert mode), plus a stripped-down offering when Dolby Vision content is input. Additionally, there's a full suite of image manipulation tools, ranging from noise reduction and frame interpolation to gamma, colour management and white balance control. Tweakers/calibrators (the TV is Calman-ready) will no doubt be happy.

For those looking for an easy preset choice, it's worth paying attention to what the modes introduce. The Vivid option is as in-ye-face as expected, but Standard also has a healthy dollop of sharpness applied and TruMotion frame interpolation set on by default. Even the Cinema mode has motion smoothing and noise reduction activated – the Technicolor expert option is the purist's choice in this regard.

A virtue of Standard is its cooler colour temperature (around 10,000-11,000K, says LG) which some may find preferable to the stalwart D65 of the Cinema/ISF options.

AV INFO

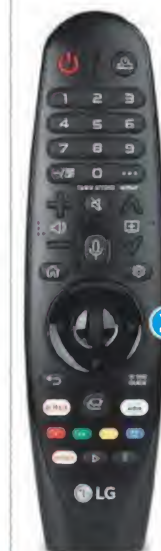
PRODUCT:
65in 4K HDR
Nano Cell LCD TV

POSITION:
Top of LG's LCD TV
lineup – although
the step-down SM90
series goes larger

PEERS:
Samsung QE65Q80R;
Sony KD-65XG9505

1. There's also a 55in SM9800 model

2. LG's Magic Remote offers a motion-controlled cursor



Just to confuse, Dolby Vision has both Cinema and Cinema Home options, the latter mode with a slight decrease in colour temp and a luminance boost.

Out for Justice

Beginning with *Justice League* (Blu-ray), and the drizzling dark of the movie's opening sequence in Gotham, the TV paints a pleasing SDR image. Even without the benefit of an HDR grade, there's a strong, bright hit to street lights and the orange glow of the Parademon's torso (LG's HDR Effect mode is a fallback for those who have moved on from SDR; it's perhaps more subtle – but also less dramatic – than you might expect).

Left to handle the action without frame interpolation, sharpness or noise reduction boosts, it still presents a crisp, theatric and easy-to-watch image. Red and yellow neon glows have a strong vibrancy to them, as do the

‘The TV's HDR and wide colour handling is beguiling. Candles and shafts of light have a healthy intensity'

greens of Alfred's computer display. Cut to the scenes of city-folk mourning the death of Superman, and the image feels lifelike and well-balanced, and bright enough to impress in a well-lit room.

And that brightness is even more in evidence with HDR and wide colour material. The 2018 *Robin Hood* flick (Ultra HD Blu-ray, Dolby Vision) offers HDR highlights and colour impact that are beguiling. There are numerous scenes where natural light sources and rich hues are thrown together, such as the early montage showing Robin and Marian's blossoming romance. Candles and shafts of light have a healthy intensity. Chapter 8's night-time horseback ride presents bursts of searing orange flame and shiny gold coins clattering to the ground.

An issue, however, is the TV's LED backlight implementation. As a direct-lit model, there's none of the



SPECIFICATIONS

3D: No **4K:** Yes, 3,840 x 2,160 **HDR:** Yes, HDR10; HLG; Dolby Vision; Technicolor **TUNER:** Yes, Freeview Play; satellite HD **CONNECTIONS:** 4 x HDMI; 3 x USB; optical digital audio output; headphone output; Ethernet **SOUND (CLAIMED):** 2.2-channel (40W) **BRIGHTNESS (CLAIMED):** N/A **CONTRAST RATIO (CLAIMED):** N/A **DIMENSIONS (OFF STAND):** 1,452(w) x 833(h) x 62.5(d)mm **WEIGHT (OFF STAND):** 27kg

FEATURES: Full array local dimming LED TV; second-gen Alpha 7 processor; Nano Cell technology; TruMotion processing; colour management system; Wi-Fi; Bluetooth 5.0; Dolby Atmos audio; One-Touch Sound Tuning; HDMI 2.1 specification (includes eARC, VRR, ALLM); Google Assistant built-in; Amazon Alexa

PARTNER WITH



ANNIHILATION: The sci-fi flick deemed 'too intellectual' for a cinema release (it was picked up by Netflix instead) is now available on 4K Blu-ray. Surreal visuals suit the HDR presentation, and the Atmos track ups the ambience. Be smart...

obvious vertical striping witnessed on edge LED sets, but a limited number of local dimming zones means the panel's illumination is still noticeable when viewed in low-light levels/darkness.

When Jason Statham lurks in the dark in the Interpol office in *Fast & Furious 7*, there's an obvious glow around his spotlighted facial features. It's diffuse, rather than blocky, but still apparent. Similarly, with *Annihilation* (4K Blu-ray), on the 'Area X' and 'The Shimmer' title screens the portentous text appears with a slight halo. Such moments are an irritating distraction, because elsewhere in the Alex Garland sci-fi the 65SM9800PLA's talents come to the fore, easily conveying the bright hues and otherworldly feel of its spooky location.

Backlight machinations are more visible when the TV is viewed off-axis, although a strength of the IPS panel is that colour saturation remains strong even from fairly wide angles. It's still best viewed square-on, of course.

Fed some tortuous demo reel material, the TV's motion handling falters with diagonal pans, being prone to judder and tearing. Yet with regular film and TV content this is less of an issue. LG's Clear setting is the best option for improving motion detail, if you don't side with Tom Cruise in this regard...

Living room-friendly

Taken as a whole package, LG's 65SM9800PLA has considerable appeal. Dolby Vision and Dolby Atmos support, the 65in screen, smart skills and its colour and brightness punch make it a living room-friendly proposition. Those who seek a display for a dark environment, however, will probably prefer something with slicker backlight management. And when shopping at the TV's £2,300 price point, LG's own OLED models (albeit at smaller screen sizes), will become tempting ■

HCC VERDICT



LG 65SM9800PLA
→ £2,300 → www.lg.com/uk

WE SAY: This 65-incher has a forward-thinking spec, slick smarts and impacts with brightness and colour. Not the most cinematic of performers, however, with backlight niggles.

3. The TV is slim at its edges, but bulks out around the rear

“Cinema is really built for the big screen and big sound, so that a person can go into another world and have an experience.”

David Lynch



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Sony stumbles with Dolby Vision

There's plenty to admire about Sony's premium disc-spinner, but that doesn't mean you'll definitely want to own one warns **Steve May**



IT'S BEGINNING TO look busy at the posh end of the UHD Blu-ray player market. Even as Panasonic and Pioneer jostle for high-end honours with their DP-UB9000 and UDP-LX500/800 models respectively, Sony has bustled back into the fray with a Dolby Vision update on its ES offering.

Feature wise, nothing much else is changed here compared to the previous X1000ES. In addition to all the usual Blu-ray and DVD variants, the deck still handles Super Audio CD and DVD-Audio discs, and has hi-res audio support. Its 192kHz/32-bit DAC is compatible with native DSD (up to 11.2MHz), and other assorted file formats.

But while Dolby Vision is onboard, there's still no support for HDR10+, which puts it at a distinct disadvantage against the premium player competition.

Beam me up

The design is minimalist, but Sony's familiar Frame and Beam chassis enhances structural rigidity. A honeycomb top plate, heatsink and offset feet conspire to reduce unwanted vibration. You feel like you're getting your money's worth.

Rear connections comprise two HDMI outputs, coaxial and optical digital audio outputs, an analogue stereo output, RS232-C jack for system control, IR remote port and Ethernet.

AV INFO

PRODUCT:
High-end UHD Blu-ray player

POSITION:
Top-of-the-range model, positioned above UBP-X800M2

PEERS:
Panasonic DP-UB9000; Pioneer UDP-LX500

Wireless functionality covers Bluetooth with LDAC support, and dual-band Wi-Fi. There's also Bluetooth transmission for compatible wireless headphones.

And the player isn't just about discs. Netflix, Amazon Prime Video and YouTube are available from Sony's home screen (all of which stream up to 4K) and there's also networked and USB file playback. The UBP-X1100ES immediately recognised both my Twonky and Plex servers.

A drop-down flap conceals Sony's disc loader, and it's quite a speedy player. My stock movie disc went from tray to menu in 40 seconds.

With 4K platters, the player delivers a superb, texturally accurate performance, interpolating UHD with 4:4:4 subsampling to best match the capabilities of the connected display device. It also looks sublime with regular Blu-ray discs. When partnered with a non-HDR display there's HDR to SDR conversion, down-mapping brightness and colour.

Unfortunately, the Dolby Vision implementation is a mess. The deck can't automatically recognise a Dolby Vision encoded disc when it plays one. Confronted with *Star Wars: The Last Jedi* on Ultra HD Blu-ray (one of the few Disney DV-encoded titles), it merely reads the HDR10 static metadata. You have to manually switch on a Dolby Vision mode in the display menu for the X1100ES to read dynamic metadata.

Even worse, once Dolby Vision is engaged, everything from the player is output with a Dolby Vision flag, be it an HDR10 disc or regular SDR Blu-ray, 'up converted' into a pseudo Dolby Vision signal by the player itself. If you

SPECIFICATIONS

4K: Yes **HDR:** Yes. HDR10; Dolby Vision **MULTIREGION:** No. Region B Blu-ray; R2 DVD **HDMI:** Yes. 1 x HDMI 2.0; 1 x HDMI 1.4 (audio-only) **MULTICHANNEL ANALOGUE:** No **DIGITAL AUDIO:** Yes. Digital optical audio and digital coaxial audio **ETHERNET:** Yes **BUILT IN WI-FI:** Yes **SACD/DVD-A:** Yes/Yes **DIMENSIONS:** 430(w) x 54(h) x 265(d)mm **WEIGHT:** 3.9kg

FEATURES: Bluetooth with LDAC; USB; iOS and Android app control; HDR-to-SDR converter; streaming services, including Netflix, Amazon Video, YouTube (all 4K); DLNA media playback; AAC, ALAC, DSD, FLAC, WMA and more file playback

The deck apes the styling of its X1000ES predecessor

want to play back content in its native format, then you'll need to dive back into the menu to switch off the Dolby Vision output.

This is the same Dolby Vision implementation Sony eventually dropped onto the more affordable UBP-X700 a while back, so it's disappointing that it hasn't worked out how to do automatic switching in the interim, like its rivals.

Sonically, the player is a star. The deck's two-channel performance can rival any audiophile CD player at a similar price point, offering outstanding spatial presentation, and creating a clean, musical soundstage.

Trailing behind

Launched in the wake of those Panasonic and Pioneer machines, the UBP-X1100ES is looking like a victim of circumstance. It's outgunned not so much in performance, but execution.

The requirement for manual Dolby Vision switching is clunky at best. It's hard to imagine AV enthusiasts putting up with a faux Dolby Vision flag for non-DV content, let alone foregoing HDR10+ support.

This is a shame, as disc playback is inherently terrific, and it sounds great as a two-channel source ■

HCC VERDICT ★★★★★

Sony UBP-X1100ES
→ £800 → www.sony.co.uk

WE SAY: Poor Dolby Vision implementation and no HDR10+ playback take the shine off Sony's universal disc spinner.

Klipsch

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Game on for HDR

Low latency and HDR compatibility make gaming on this 1080p Optoma a bright idea, says **Steve May**



SMART AND COMPACT, with a glossy white finish, this new 1080p DLP projector from Optoma is designed for living room rather than dark theatre use. So far, so typical, but what makes the HD29H particularly interesting is that while it's unequivocally a Full HD model, it's also HDR compatible. It'll read HDR10 metadata and attempt to produce a correctly balanced dynamic image.

The combination might seem odd, but makes perfect sense for its core audience: gamers. All iterations of the Sony PlayStation 4 can present games in HDR – the feature isn't limited to the high-end 4K-capable PS4 Pro.

Another key attribute is low image lag, with Optoma suggesting a best-in-class 8.4ms response time. It also has the ability to accept a 1080p 120Hz input. Anyone up for a *Quake* marathon?

To suit this target market, the HD29H claims a brightness of 3,400 Lumens. In use this makes it entirely possible to play games or watch sports with high levels of ambient light in the room.

The PJ will most likely end up installed on a coffee table. Light at just 2.5kg, it's no hassle to roll-out when the

mood takes you. A 1.1x zoom enables a throw ratio of 1.47-1.62:1. Zoom and focus adjustments are manual. Vertical keystone correction is provided if needed.

Connections include two HDMI inputs, of which one is v2.0 and accepts 4K sources, which are then downscaled to 1080p. A benefit for AV fans is that you'll not need to constantly adjust the output setting of your source device depending on whether you're hooking up to a TV or the projector.

The HD29H is also 3D compatible, although active shutter 3D glasses are an optional extra.

Over the rainbow

This Optoma may be gaming-focused, but its image quality is solid with movies too. There's no shortage of detail and nuance in Michael Douglas's visage, even when he has been de-aged, in *Ant Man* (Blu-ray). I did pick up on some DLP colour fringing in areas of high contrast (AKA rainbow effect), but generally found this DLP trait not overly intrusive. And the native brightness creates noticeable colour vibrancy; animated content and console game cut-scenes in particular look spectacular.

More contentious is black level performance. A Dynamic Black mode adjusts the projector's lamp output dynamically based on the brightness of each frame, resulting in a contrasty image which makes a good fist of retaining dark detail; a play-through of *Sekiro: Shadows Die Twice* (PS4) provides the projector with a chance to show this off.

SPECIFICATIONS

3D: Yes. DLP active shutter **4K:** No. 1,920 x 1,080 Full HD **HDR:** Yes. HDR10 **CONNECTIONS:** 2 x HDMI inputs; 3.5mm audio minijack; powered USB **BRIGHTNESS (CLAIMED):** 3,400 Lumens **CONTRAST RATIO (CLAIMED):** 50,000:1 **Zoom:** 1.1x **DIMENSIONS:** 316(w) x 108(h) x 244(d)mm **WEIGHT:** 2.5kg

FEATURES: Single-chip DLP; built-in 10W sound system; lamp life claimed at 6,000 hours (Bright), 10,000 hours (Eco); Cinema, Vivid, Game, Reference, Bright and User picture presets; 1.47:1-1.62:1 throw ratio; ISF Day/Night calibration support

The PJ sports Optoma's usual design

Yet deeper blacks can grey out, leading to near black shadow loss and a flattening of the image depth.

Overall, however, the picture remains consistently contrasty and engaging. A binge of *Stranger Things* (Netflix) kept much of the darker mood intact.

When an HDR source is received, the HD29H's default image preset kicks in. In truth, with movies, this can make pictures a little dim. Thankfully, there's the option to switch HDR support off.

With non-HDR content you get a far wider selection of display modes, including ISF support for calibrated Day and Night settings. There are also colour management, colour temperature and gamma adjustments (and more) for fine-tuning.

Operating noise is minimal, and easily disguised by an exterior sound system (there's an integrated 10W speaker too, which isn't short of volume, although you really wouldn't want to listen for long on maximum). Selecting the Eco brightness mode leads to a further reduction in hubbub – frankly, the average Xbox One X is noisier. When running HDR, however, the HD29H does fluctuate in fan noise, which can be a bit distracting.

Heaps of fun

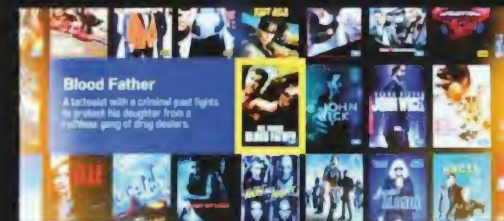
As an all-purpose media room projector, Optoma's HD29H has a lot going for it. Its bright output makes it easy to use in less than perfect conditions and picture quality is impressive, save for some black level shortcomings. The combination of 1080p and HDR is unusual, but worthwhile. Brilliant for gaming, good for general entertainment, not too pricey... and heaps of fun ■

HCC VERDICT ★★★★★

Optoma HD29H
→ £700 → www.optoma.co.uk

WE SAY: This blindingly fast DLP gaming projector brings HDR support to bright, colourful 1080p images. The combo is a bigscreen winner.

A home cinema without compromise



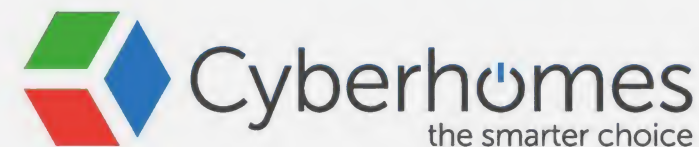
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Dancing on the...

Steve Withers gets a Lionel Richie earworm while checking out Klipsch's top-of-the-range Dolby Atmos upfiringers



Klipsch's two-way upfiringers feature 5.25in midbass units

IMMERSIVE AUDIO HAS made in-roads over the last few years, with Dolby Atmos (and to a lesser extent DTS:X) available on Blu-rays, games and streaming/broadcast TV. However if you want to enjoy some object-based action, at some point you're going to have to address the issue of overhead channels.

Dolby realised this from the start, so developed Atmos speakers in conjunction with a number of manufacturers. The idea is simple: you fire the audio upwards at an angle, bouncing it off the ceiling and down towards the listener. This creates the illusion that overhead channels are emanating from speakers above your head.

Klipsch's RP-500SA is just such a speaker and forms part of its Reference Premiere

AV INFO

PRODUCT: Dolby Atmos elevation/surround speaker

POSITION: Premium upward-firing module

PEERS: KEF R50; Elipson Prestige Facet 6ATM

range. It utilises the same 5.25in woofer and Tractrix horn tweeter as the rest of the lineup, but also includes Dolby's proprietary psychoacoustic wizardry. A pair sells for £575, with a choice of ebony or walnut finishes, and magnetic grilles.

The speaker is more versatile than your average topper, with the option of a surround, height or upward-firing orientation. Depending on your speaker config, you simply flip the switch on the rear between Atmos or surround. There's a keyhole for wall-mounting, and binding posts are recessed for tidier cabling when placed atop another speaker.

The RP-500SAs were tested as part of a 5.1.2-channel system with a pair Klipsch's RP-6000F floorstanders. They fit comfortably on the towers but are fairly large, which might be an issue if you're positioning a second pair at the rear (which I'd recommend).

Look up

The effectiveness of any upward-firing speaker is largely dependent on the ceiling: if it's low and reflective you're good to go, but if it's high, vaulted, or absorbent then you should probably look elsewhere. You also can't bounce low frequencies, so bear that in mind when setting the crossover (Klipsch suggests a minimum of 150Hz for the RP-500SA).

In the right environment these upward-firingers really deliver the overhead goods, with acoustic beams effectively reflecting off the ceiling to create the perception of overhead channels. These sounds are integrated with the other speakers in the

SPECIFICATIONS

DRIVERS: 1 x 5.25in spun copper Cerametallic woofer; 1 x 1in Titanium vented tweeter with Tractrix horn
ENCLOSURE: Sealed **FREQUENCY RESPONSE (CLAIMED):** N/A **SENSITIVITY (CLAIMED):** N/A **POWER HANDLING (CLAIMED):** 75W-300W **DIMENSIONS:** 173(w) x 188(h) x 284(d)mm **WEIGHT:** 3.6kg

FEATURES: Dolby Atmos certified Elevation speaker; switchable crossover between Dolby Atmos/surround use; keyhole mounting; ebony or walnut finish; removable magnetic grilles

soundstage, although since I was running a 5.1.2 system, they were concentrated at the front of the room.

I have a number of Atmos discs that I use for testing, all with scenes that employ the overhead channels extensively. *Goosebumps* (US Blu-ray) is a great example, particularly the scene where the Invisible Boy is on top of the car. You can hear his feet hitting the car roof above you, with the Klipsch speakers delivering each footstep with good precision.

Another excellent example of overhead vehicular action is found in *San Andreas* (UHD Blu-ray) where Ray (The Rock)'s daughter is trapped in a limo that's being slowly crushed. You can hear rocks hitting the roof and metal buckling, which adds a sense of claustrophobia. This scene also perfectly demonstrates the speakers' adept handling of midrange and higher frequencies.

I should stress that despite the Atmos badging, these speakers will work just as well with DTS:X soundtracks. To check this I popped on the new 4K release of *Hellboy II: The Golden Army*, and watched the early sequence where our heroes battle a monster during a storm. The sound of thunder rolls overhead and the accompanying torrential rain feels both detailed and immersive.

High-end height

Klipsch's RP-500SAs are at the higher end of the upfirer price range. There are plenty of more affordable alternatives, including the KEF Q50A, Elipson's Prestige Facet 6ATM, and PSB's Imagine XA. However, if you're running a higher-end system, and especially if it's composed of Klipsch Reference Premiere speakers, the sonic results (and surround speaker function) are worth the extra outlay ■

HCC VERDICT ★★★★★

Klipsch Reference Premiere RP-500SA
→ £575 → www.klipsch.co.uk

WE SAY: Versatile speakers to be used as surrounds, heights, or upward-firing – object-based fun with the minimum of fuss.

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Sony masters 8K TV

The brand's debut 8K display – the Master Series ZG9 – is the best reason yet to make an early jump into 4,320p, says **Steve May**

AV INFO

PRODUCT:
85in 8K LED LCD TV

POSITION:
Premium Master Series TV, with a 98in model also available

PEERS:
Samsung QE82Q950R; LG OLED88Z9

SONY HAS BECOME the second TV major to debut an 8K screen, with its Master Series ZG9. This 8K debutante comes in suitably monster 98in and 85in screen sizes. With the former retailing for £85,000, the average ZG9 is clearly not going to appeal to the man in the street, unless of course that man happens to live on Rodeo Drive. We opted to audition the budget option, a snip at £14,000. Given there's not a lot of choice in the 8K flatscreen market, the ZG9 squares up directly against Samsung's Q950R series, and proves a formidable competitor. Physically the TV is imposing. The set accommodates a revised iteration of Sony's FALD (Full Array Local Dimming) Backlight Master Drive; cleverly calibrated LED lights that promise brighter, more precise HDR. The FALD panel sits atop a slightly larger frame, which sports four forward-facing speakers split above and below the screen. Sony dubs this sound system Acoustic Multi-Audio. The ZG9 can also double as a centre speaker in a multichannel sound system. There are two heavy-duty stand options, both substantial in order to cope with the set's 71.7kg bulk. For the tabletop feet you'll need wide, substantial AV furniture; the other uses a floor-standing tripod leg design.

The TV has four HDMI inputs, but only one (HDMI 4) is able to support 8K/60p sources (and is awaiting HDMI 2.1 certification), while HDMI 3 supports eARC. They're supported by three USBs, a mini AV input, optical digital audio output, plus Ethernet and Wi-Fi. The screen comes with the latest Oreo Android TV OS, and offers all the front-line streaming apps, including YouTube, Netflix and Amazon Prime Video. Google Assistant is also built-in, with a red LED light to the right of the Sony logo to indicate that Google is awaiting your command. There's also support for Apple AirPlay 2 and HomeKit smart home applications. One refinement to the Sony UI this year is a quick settings bar that pops up from the bottom of the screen. This can be edited to reflect what shortcuts you wish to see, from sound/picture settings to network status. Useful.

Pulse-pounding picture quality
If I were to suggest image quality on this premium flatscreen was anything less than astonishing you'd probably be disappointed. But I'm not, so you won't. The ZG9 provides a mesmerising viewing experience, with images that are blisteringly sharp and vibrant.

Much of the credit can be attributed to the latest edition of Sony's X1 Ultimate image processing engine, first introduced on the brand's 4K models. Here, everything appears to have had a tune-up. Object-based super resolution, HDR remastering, dual-database processing and Dynamic Contrast Enhancer have been given a wider expressionistic canvas. Re-rendered 8K footage (provided by Sony) from *Gran Turismo* looked sensational, while travel footage captured around Vienna exhibited almost three-dimensional depth. An 8K sequence shot at the Rio Carnival wowed with a glorious parade of yellow and glittering gold. This doesn't look like any TV picture you'll have seen before. The minuscule detail in the image is seductive; you'll want to sit closer to view clearer. All of which begs the thorny question: how far should you sit from an 85in 8K screen? To really appreciate its clarity, 1.5-2x screen height is a good metric. But even on this Jumbotron, many will argue that you're simply sitting too close. Park your sofa three metres away and you're certainly not able to appreciate the really subtle detail. But perhaps that doesn't matter? What you have here is a panel that's astonishingly immersive. Sony describes the image density offered by 8K as 'realness', and there's some accuracy to that. The sense of texture created by the increased PPI (pixels per inch) makes for a rather different experience than 4K models. With high-quality sources, the Vivid preset, with its oversaturated primary colours and high brightness, is a real eye-catcher. Most, of course, will opt for the Standard and Cinema options, which dial this vibrancy back – but not to a point that translates to a significant lack of pop. The Custom mode is actually Sony's old Cinema mode, which is considerably less impactful. HDR support covers HDR10, broadcast HLG and Dolby Vision. There's no compatibility with HDR10+. Not that this screen needs to aggressively tone map. It's one of the brightest, most dynamic LED LCD TVs I've ever encountered. I measured peak brightness upwards of 3,000 nits, using a 10 per cent HDR window on the Standard image preset. The result is superb specular highlight detail. Peaks are (very) bright, and the LED modules on the Backlight Master Drive are independently controlled to give maximum contrast. According to Sony's engineers, the 8K X-tended Dynamic Range PRO processing allied to the TV's multizone FALD backlight uses saved energy to intelligently boost the brightness in the areas where needed (which sounds a bit like the Kinetic Energy Recovery System used in F1 cars. Okay, this analogy may be off the pace but the end result certainly puts Sony in HDR pole position). Black level performance is class-leading. Peaks are (very) bright, and the LED modules on the Backlight Master Drive are independently controlled to give maximum contrast. According to Sony's engineers, the 8K X-tended Dynamic Range PRO processing allied to the TV's multizone FALD backlight uses saved energy to intelligently boost the brightness in the areas where needed (which sounds a bit like the Kinetic Energy Recovery System used in F1 cars. Okay, this analogy may be off the pace but the end result certainly puts Sony in HDR pole position). Black level performance is class-leading. **At home with 1080p** 4K content is expertly, naturalistically upscaled. There's no sense of over-processing or artifice. 8K upscaling is not really about making 4K look better, it's more about not making it look worse. And this set gets the balance right. Actually, where the ZG9's image chops really impress is taking an HD picture and remapping it to 8K. With original 1080p content there really does seem to be more nuance and depth in the image. Motion handling remains a strong suit of Sony. On the ZG9, Motionflow settings are limited to Auto and Custom, which offers adjustable smoothness and clearness. I'd

SPECIFICATIONS

3D: No **ACTIVE 4K:** Yes. 7,680 x 4,320 (8K) resolution **HDR:** Yes. HDR10; Dolby Vision; HLG **TUNER:** Yes. Twin HD satellite; Freeview HD **CONNECTIONS:** 4 x HDMI inputs; 3 x USB; mini AV input; optical digital audio output; Ethernet **SOUND (CLAIMED):** 80W **BRIGHTNESS (CLAIMED):** N/A **CONTRAST RATIO (CLAIMED):** N/A **DIMENSIONS (OFF STAND):** 1,910 (w) x 1,140 (h) x 120 (d)mm **WEIGHT (OFF STAND):** 71.7kg

FEATURES: Built-in Wi-Fi; Bluetooth; Google Assistant built-in; FALD backlight; X1 Ultimate image processor; 8K X-Reality PRO; 8K X-tended Dynamic Range PRO; X-Motion Clarity; Android Oreo OS; 8K/60p on HDMI 4

PARTNER WITH



DELUX DECO PARAMOUNT: Park yourself in front of Sony's monster display on a luxurious home cinema seat. The electric recline, Italian leather Paramount range begins with single chairs for £750, and steps up to five-/six-seater designs.



1. The ZG9's full array LED backlight exceeds 3,000-nit brightness peaks

2. To take the TV's 71kg weight, Sony provides sturdy feet

normally advise turning Motionflow off for movies, but if you do, judder becomes quite apparent on a screen this large. The Custom setting is a good compromise, with Smoothness on '2' and Clearness at '1'. Interpolation effects aren't too intrusive. As for that Acoustic Multi-Audio sound system, it's impressive. The forward-facing speakers are difficult to spot, and the rear-mounted woofers similarly discreet, but the soundstage is wide, large and in your face. There's a decent mid-range and a fair amount of slam, great for space battles and action scenes. And, yes, the set does offer Dolby Atmos decoding and passthrough.

Super-large, super impressive
While there's no compelling reason to upgrade to 8K just yet, the ZG9 could be an arm-twister for the well-heeled. Image clarity and fine detail is stunning, and Sony's multi-driver speaker assemblage is effective. In short, it's the best super-large LED TV I've experienced. There's probably already a waiting list in Beverly Hills ■

HCC VERDICT ★★★★★

Sony KD-85ZG9
→ £14,000 → www.sony.co.uk

WE SAY: This uncompromising 8K giant offers best-in-class HDR, with superb fine detail and colour vibrancy, coupled to a dynamic sound system. You don't need one, but you'll want it.

Flexing muscle

New and improved, this entry-level wireless sound system is both bold and beautiful, says **Steve May**



Up to five sources/streams can be assigned to preset keys

THE SMALLEST OFFERING in the Bluesound family, the Pulse Flex 2i is an upmarket wireless sound system with multiroom functionality. But with more companies entering the space, can this subtle update on an existing product still command its premium £300 price?

Well, for one thing that 2i label indicates the inclusion of Apple AirPlay 2 and dual-band Wi-Fi, courtesy of an upgraded Wi-Fi chipset. The system is also now compatible with

Amazon Alexa, although the need to go through a separate voice-control interface, BluVoice, spoils the interaction.

As with fellow Bluesound hardware, the build quality here is admirable. The join-free cabinet has a tactile finish, while the mesh grille hides a 1in tweeter

and 4in woofer. It's available in either black or white. While designed to be driven by the BluOS app, there are controls on the speaker's top. These include useful preset keys that can be assigned to services and inputs. Physical connections are more comprehensive than you might imagine. In addition to Ethernet for wired networking and a USB media reader, there's a 3.5mm input which supports both analogue and optical digital sources, using a supplied adapter. BluOS includes a proprietary music management system for streaming services, internet radio and podcasts. File compatibility is exhaustive and covers FLAC, MQA, WAV, AIFF, MP3, AAC, WMA, OGG, and ALAC. With AirPlay 2, you can stream music and podcasts, as well as audio from YouTube or Netflix, to multiple connected AirPlay speakers. You can ask Siri to play Ed Sheeran in one room, and Slayer in another (not that I'd ever ask Siri to play Ed Sheeran). The ecosystem can support up to 64 players connected through the BluOS Controller app.

SPECIFICATIONS

DRIVERS: 1 x 4in woofer; 1 x 1in tweeter
ONBOARD POWER (CLAIMED): 25W
CONNECTIONS: Ethernet; USB; 3.5mm digital optical audio/analogue input; 3.5mm headphone output
INTEGRATED SERVICES: (Via BluOS app) internet radio; Spotify; Tidal; Amazon Music; Deezer; Qobuz; Napster
DIMENSIONS: 183(w) x 125(h) x 100(d)mm
WEIGHT: 1.23kg

FEATURES: Dual-band Wi-Fi; aptX Bluetooth (4.1); multiroom support; Amazon Alexa integration with BluVoice; Apple AirPlay 2; FLAC, MQA, WAV, AIFF hi-res file playback

Setup is largely friction free. Power up the speaker, download the BluOS app, let the two banter, and you're ready to stream (there will probably be a firmware update required, but this is handled automatically).

Hi-res audio comes as standard. The system supports streams up to 24-bit/192kHz, to multiple speakers with no apparent lag. Unfortunately Bluesound has decided this model needs only aptX Bluetooth 4.1, and not aptX HD, so no Qualcomm CSR8675 chip employed further up the Bluesound range.

It's the smallest speaker in the Bluesound stable but the Pulse Flex 2i has an output that belies its physical size. Take one into the garden (an optional £70 battery pack makes it truly portable) and neighbours will wonder where the festival has pitched up. Providing this clout is a 25W DirectDigital amplifier.

Its output is monophonic, but this limitation is balanced by crisp detail and a smooth mid-range. Vocal clarity is superb, making this compact speaker a great choice for audiobooks and podcasts. The upgraded bass driver delivers a nuanced and forceful low-end.

Obvious addition

If you've already invested in a Bluesound system, this versatile all-in-one is an obvious addition. It's a tight, cohesive performer with bonkers DSP-enhanced bass, and excellent articulation.

However, if you want a small speaker primarily for voice interaction there are more affordable options available, be they Amazon's own Echo models, plus Google Assistant-enabled rivals from Harman/Kardon, LG and more. And Sonos' similarly sized Play:1 remains an obvious challenger. If musicality is paramount, though, you won't be disappointed ■

HCC VERDICT ★★★★★

Bluesound Pulse Flex 2i
→ £300 → www.bluesound.com

WE SAY: This wireless speaker may be small but it sounds huge, and it's compatible with MQA and other hi-res audio sources. Playful and potent.



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Don't Look Now: Collector's Edition

Studiocanal is bringing Nicolas Roeg's legendary horror thriller *Don't Look Now* to 4K Ultra HD Blu-ray on July 29. The brand-new restoration will be available to own as part of Studiocanal's Vintage Classics collection on DVD, Blu-ray and as a Collector's Edition that includes the film on both 4K Ultra HD and Blu-ray, plus a bonus Blu-ray containing previously unseen extra features, and the original Pino Donaggio soundtrack CD. To celebrate the release we have three copies of the *Don't Look Now: Collector's Edition* to give away!

Question:

Don't Look Now is based on a short story by which English author?

Answer:

- A) Daphne du Maurier
- B) Patricia Highsmith
- C) Agatha Christie



The Colossus of New York & Crack in the World

101 Films is releasing the sci-fi cult classics *The Colossus of New York* and *Crack in the World* on Blu-ray for the first time ever in the UK on August 5. To celebrate we have three sets of the two Blu-rays to give away.

Question:

Crack in the World's leading lady Janette Scott battled killer plants in which film?

Answer:

- A) *The Day of the Triffids*
- B) *Invasion of the Body Snatchers*
- C) *Attack of the Killer Tomatoes!*



Early Women Filmmakers 1911-1940

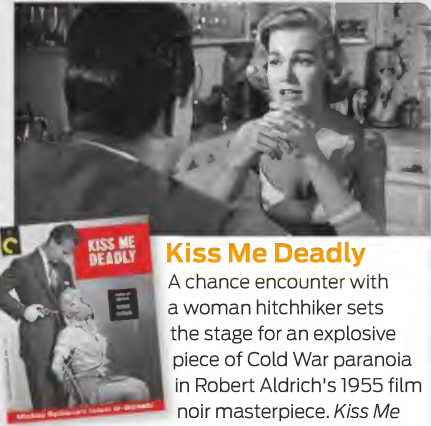
The BFI celebrates the rich history of pioneering women filmmakers with this epic four-disc Blu-ray boxset collecting together 22 films by nine of cinema's most influential female directors. *Early Women Filmmakers 1911-1940* is out now, and we have one boxset up for grabs!

Question:

Who was the first female filmmaker to win the Academy Award for Best Director?

Answer:

- A) Jane Campion
- B) Kathryn Bigelow
- C) Patty Jenkins



Kiss Me Deadly

A chance encounter with a woman hitchhiker sets the stage for an explosive piece of Cold War paranoia in Robert Aldrich's 1955 film noir masterpiece. *Kiss Me Deadly* is available on Blu-ray from August 5, courtesy of The Criterion Collection and Sony Pictures Home Entertainment, and we have five copies to be won!

Question:

Kiss Me Deadly stars Ralph Meeker as which fictional hardboiled private investigator?

Answer:

- A) Mike Hammer
- B) Dick Spanner
- C) Philip Screwdriver

To enter any of the above competitions go to www.homecinemachoice.com/competitions

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The BBC has sought approval from Ofcom to enable its iPlayer service to retain shows for longer. Boxset binger **Mark Craven** believes the proposals make total sense

WE'RE TOLD BY media watchers and show promoters that we're living in a Golden Age of television. And, when you compare the treats available now to the productions of decades gone by, it's hard to argue against it. Certainly, I get a lot more out of TV in 2019 than I did in, say, the early 1990s. More choice, greater production values, better technical quality and far less Noel Edmonds.

The way we watch TV is changing, too. A boxset binge is something you used to do with a DVD of your favourite series, months after it had aired (weekly) on terrestrial TV. Now it's a streamed session of a show that's often only just been made available. That 'Next episode will play automatically' pop-up is hard to ignore.

Netflix, Amazon and Sky Boxsets are primed to make the most of our new, insatiable demand for serial telly. But the BBC hasn't been, forced to remove most (but not all) programming from its iPlayer platform 30 days after terrestrial broadcast. Until now, that is.

Please Sir, I want some more...

Earlier this year, the broadcaster put forward a proposal to Ofcom to make some changes. This was its trio of suggestions: 'Programmes should be available on BBC iPlayer for at least 12 months after they are first shown; selected returning titles should be available as full boxsets of all series; and BBC iPlayer should showcase more content from the BBC archive.'

These developments, the BBC believed, would go some way to making iPlayer at least slightly competitive with Netflix *et al*. Actually, 'competitive' isn't the right word. The public service broadcaster instead talked of bringing iPlayer 'into line with the industry standard' and allowing it to 'innovate and

evolve its service in line with changing market norms and audience expectations.' Auntie doesn't want to beat Netflix, it just wants to remain relevant.

What strikes me as a little odd is that, in audience research conducted as part of the BBC's Public Interest Test, 66 per cent of respondents felt the proposed changes would make the iPlayer 'more appealing.' Looked at the other way – and allow me to rashly expand the sample size to the whole of the UK – that means a third of the population doesn't care that BBC TV shows disappear from sight after a month. Maybe they're all Netflix subscribers...

There are competition arguments against the BBC being given 12-month streaming windows, and it'll surely impact its ability to make money selling the same content to third-party distributors. But, from a couch-bound telly addict perspective, I'm all in favour, so was pleased when Ofcom gave the proposals 'provisional approval' in June, with a final announcement to be made in August.

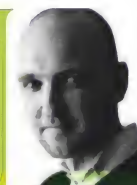
Even before Ofcom's response, there was a glimpse of what a future iPlayer might look like. During the recent run of Season 2 of *Killing Eve* (pictured) on BBC One, all of the previous season's episodes (which last aired in Autumn 2018) were there to be devoured on iPlayer. And the entirety of Season 2 was available to stream from the moment the first episode was broadcast.

The BBC was able to break its 30-day model for *Killing Eve* as it's an acquisition (from BBC America) and the streaming plan was in place before Ofcom asked for the Public Interest Test to be completed.

This, to me, feels very much the way it should be; the kind of viewer-first ethos found everywhere else. Let the BBC join in the fun ■

Should the BBC be allowed to stream shows for 12 months? Let us know: email letters@homecinemachoice.com

Mark Craven can remember when boxsets were on VHS, and an entire shelf had to be found for all 275 episodes of *Cheers*



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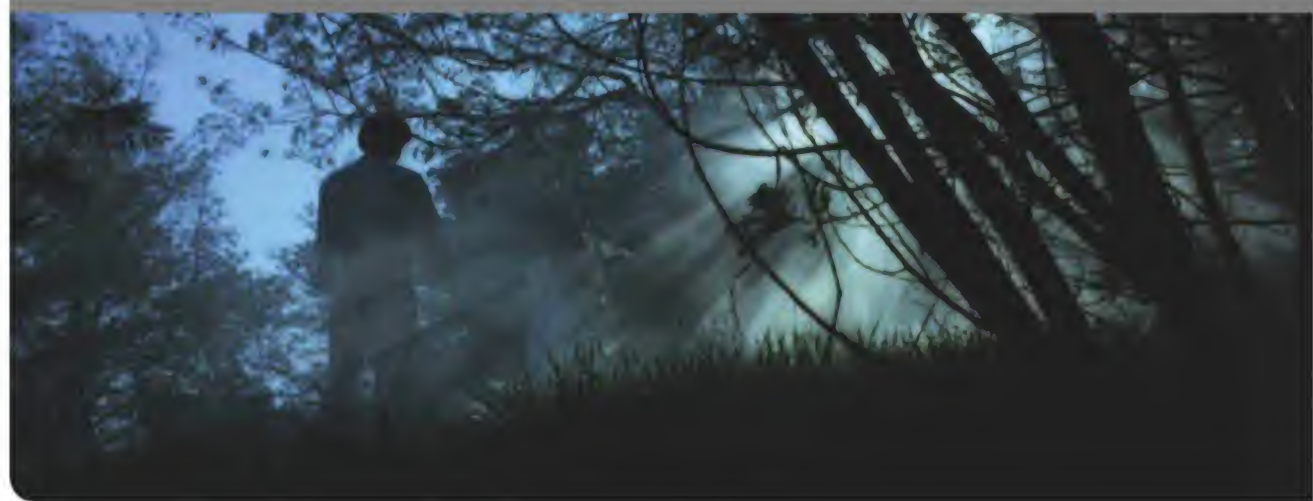
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Film Fanatic

Anton van Beek looks back across 20 years of the home entertainment industry and promises that as much as it may change, his love of labels that put in the effort never will...

POP QUIZ, EVERYONE: What links *The Iron Giant*, *The Matrix*, *The Sixth Sense*, *The Blair Witch Project*, *Fight Club* and *Star Wars: Episode I – The Phantom Menace*? The answer, of course, is that these films were all released in 1999 (well, I never said it was a particularly difficult quiz, did I?).

These films are far from the only things to be celebrating a 20th anniversary. There's one that hits closer to home. 1999 was also the year I arrived in London and embarked on a career writing about the home entertainment industry.

I started as a staff writer on *Home Cinema Choice's* former sister magazine *Total DVD* (or *totalDVD* as it would eventually be re-branded), and what an incredible time it was. With the first DVD movies having only hit the UK the previous year, the format was very much in its infancy at the time. But despite regular annoyances like 'flipper' discs (which split a movie across two sides of a DVD) and extra features that would mysteriously vanish on the trip across the Atlantic, it was hard not to be excited by both the huge uptick in AV quality that DVD offered and how filmmakers might make use of the format's advanced features.

Interactive smut?

As it happened, we didn't have to wait long at all for the latter to bear fruit. I still remember heading to the flagship Warner Village Cinema in Leicester Square (now the Vue West End) in 1999 to cover the press launch of the DVD release of *The Matrix*.

As much as I'd enjoyed the movie, it was the preview of the disc's *Follow the White Rabbit* feature that really blew my tiny little mind. Allowing you to click an onscreen icon during specific action sequences in order to watch a short behind-the-scenes video, before being 'seamlessly' returned

to where you left off in the film, this seemed to me like the dawn of a dazzling interactive new era in home entertainment. Naturally, before long the *Total DVD* office was visited by a distributor of 'adult' movies wanting to demo his latest interactive disc – **a virtual maze users had to navigate using the DVD player's remote in order to find naughty clips to watch**. Not quite the future we had been looking forward too, but at least they were making the effort.

Fast-forward to 2019 and things are very, very different (and not only because it's impossible to imagine anybody actually paying for smut thanks to its ubiquitous nature online). 'Extras' seems to have become a dirty word with most of the Hollywood majors – hardly a surprise given that they're all so focused on fragmenting the streaming market to breaking point by each racing to launch their own studio-dedicated SVOD platforms.

Thank heavens then for those boutique Blu-ray labels like 101 Films, 88 Films, Arrow, Eureka, Indicator, Second Run and Third Window. These may not force you to clumsily navigate your way through a series of low-res computer-rendered corridors in the hope of seeing a few minutes of naked bodies writhing around, but they do go out of their way to create bonus material featuring exciting new voices; the sort of insightful extras that can put even films you know inside out in a brand-new light.

This is why I've always championed these labels in these pages, even if the actual films don't always seem to deserve it (*American Horror Project: Volume Two* being a case in point – see p93). Will extra features and physical media still be around in another 20 years? I hope so ■

What do you think the future holds for physical media? Let us know: email letters@homecinemachoice.com

Anton van Beek is amazed there isn't a '20th Anniversary' 4K Blu-ray release of *The Blair Witch Project* in the works somewhere...



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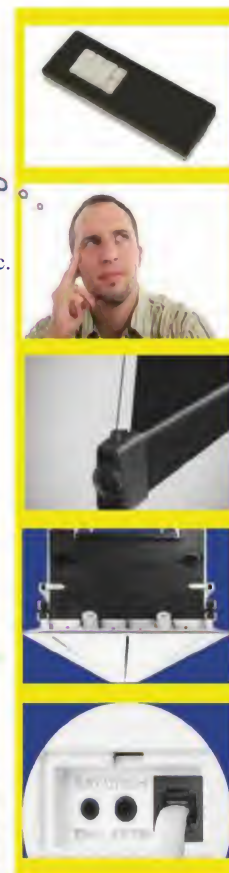
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Point of View

Richard Stevenson discovers that allowing his home cinema room to become a temporary storage area was a bad idea – now he's desperate to get back in

THERE ARE A lot of things in life you only miss when they are gone. Doughnuts, pints of beer and body parts are right up there, but so too is home cinema. In fact, I am thinking of petitioning for Post Home Cinema Stress Disorder to be registered as a real, er, thing.

It started innocently enough with a bit of domestic refurb. After a decade and a half at Chez Stevenson a lot of things had become unkempt, worn out and shabby. So had the house [groan – Ed]. A programme of decorating ensued that would have had Laura Ashley herself getting out the pasting table and emulsion. At this point for reasons I can't remember, my cinema room was designated a storage area for furniture and other items that didn't require a light splattering of Dulux's finest.

Now, I'm a big fan of multiple home cinema seating, but three sofas in a room where you would get grazed knuckles swinging a cat felt a little snug. Yet it was the fridge freezer's arrival, slightly clipping the screen, that caused the sort of apocalyptic strife that Ridley Scott could make a trilogy out of. Comparisons between reflective versus matte screen finishes are interesting and I've written much on projector screen materials, although in hindsight paper would have been better [another groan – Ed]. Even so, I wasn't really prepared for the visual carnage caused by DLP hitting a slice of brushed stainless steel and a chrome Hotpoint logo.

Like any sensible family, we moth-balled the home cinema room and moved into the lounge. I'll be honest, I knew we had one, I just don't go there much. Last time my wife and I had a TV evening we watched a *Game of Thrones* boxset back to back. Unfortunately, I wasn't the one facing the TV [okay, stop it now – Ed]. On this occasion she lured me in by reminding me the lounge does have Netflix access

and a 65in 4K TV review sample the manufacturer didn't know what to do with on account it was curved. It reflects light from both windows and every light fitting in the room. **Curved TVs; what was the industry thinking?** I digress.

An audio catastrophe was averted by the arrival of Samsung's HW-Q70 soundbar [see *HCC* #300]. Not exactly the 13.2-channel mayhem of the cinema room but an efficient, smaller-scale replacement.

Driving me nuts

A week on, though, and I'm getting twitchy. With most of the kitchen in a skip, a cup of tea was hard to come by and rural broadband was making a mockery of Netflix's 4K potential. I missed the sheer brutality of my dual 18in subwoofers. Imagine me as Scrut from *Ice Age*, stressed senseless and developing a nervous tick when someone takes away his acorn.

The acorn kept slipping out of my grasp, too. Kitchen works stalled on discovering cracks and structural problems, and a bathroom leak meant clearing the downstairs bedroom into the cinema room as well. Right now, if I peer round the door, all I can see is the underside of a pocket sprung mattress. It was when I had to explain to a manufacturer that retrieving a subwoofer I'd borrowed would require luck, guile, mythological maps and quite possibly Rachel Weisz, that I realised I might have a bit of an 'issue'.

I'm on the road to getting PHCSD under control though. There is now a floor in the kitchen, raising hopes of soon having a home-cooked meal and potentially rediscovering the delights of my cinema room. I'm already trying to choose the first movie. Tom Hanks' *The Money Pit* springs to mind ■

Have you ever had to give up your home cinema? Let us know: email letters@homecinemachoice.com

Richard Stevenson has vowed that next time he'll take his entire home cinema setup into the garden and live in a tent



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Feedback

Got an axe to grind? Need to comment on current tech? Want to share your knowledge with our readers? **Team HCC** is here to help



Premium PJ needs a processor!

Further to being featured as an AV-Holic in HCC [see #296], I am writing to follow up with observations and my own review of the upgrade from a JVC DLA-X7500 to the latest DLA-NX9.

The projector arrived about 12 weeks ago, and because of its size and considerable weight (around 20kg) I have had to modify the housing with some clever metalwork consisting of a metal tray and brackets to hang it from the trusses of the roof structure. I have also fitted four fans to provide cooling and airflow, which it turns out are totally unnecessary as the projector takes most cooling air from the rear and expels the hot air from the front vents. It hardly gets any warmer than blood temperature at the outer casing after up to eight hours of use.

With the projector being such a large investment I of course anticipated some improvements on the previous one, and to start with, I had some doubts.

There are numerous adjustments, exacerbated by the many modes of viewing and, of course, HDR. I initially left it at factory settings apart from the usual lens adjustments, and started viewing a movie from my Sky Q box. Picture quality was excellent, certainly an improvement on the DLA-X7500. The first viewing was a supposed 4K movie, but without HDR.

The next source was Netflix – one of the episodes from *Lost In Space*. Again picture

quality was excellent – about as good as I have ever seen anywhere. Amazon Prime followed, with an episode from the third season of *The Grand Tour*. Picture quality was best with the out of studio (or tent) content.

Next was a test with a 4K Blu-ray from my Panasonic DP-UB820 player. I began with *A Star Is Born*, and this is where the problems started. Colour and brightness and picture saturation were far from acceptable so I had to start delving into the settings of both the Panasonic player and NX9 projector. We were now in HDR mode, with high lamp brightness, and I adjusted gamma, checked REC.2020 settings and viewed the information menu on the projector to see the metadata from the disc.

Whatever adjustments I made just didn't meet my expectations for overall consistent picture quality throughout this movie and a number of others. I decided therefore that I really needed to engage an ISF calibrator (Gordon Fraser) to set the projector to its optimum settings. Gordon has now been, and after some hours of calibration and comparisons with a Sony £9,000 projector, my findings are as follows.

With Sky Q broadcasts of all resolutions picture quality is great – as Sky does not broadcast with HDR this does not become an issue. With Blu-ray discs again picture quality is excellent. Where problems really do exist is with HDR. Here, to be fair to all parties, the problem is its implementation. The media

A sight for sore eyes

Watcha guys. When HD first started all we heard was 'it's just like being there.' Then with 4K we have 4x the picture quality of HD. Now there is talk of 8K in the future.

My question is: if HD is like seeing the real thing and 4K/8K are 4x to 16x higher, what would be the natural resolution of the human eye?

Lee Regan

Mark Craven replies: The short answer, according to a scientific paper by MIT alumni Dr. Roger Clark, is that the equivalent resolution of the human eye is 576 megapixels (vs the 33 megapixels of 8K) – but much of that is used for peripheral vision (I think: I'll admit I found Dr Clark's analysis very, very confusing). The reality is that 8K is more 'just like being there' than HD was...



providers really do need to get their act together and ensure the HDR metadata on all discs is present and more importantly correct. JVC relies on this data in the projector's tone mapping function to achieve acceptable results. However, I question why in a projector of this price JVC has not implemented similar analysis of the content, on a frame-by-frame basis, achieved by Lumagen's video processors. This brings optimum tone mapping on the fly throughout the movies.

Without such analysis, you have to accept less than optimum HDR performance. When the Panasonic UHD player's colour mapping and correction was engaged, this seemed to confuse the overall perception of this important measure of picture quality. Not really a solution.

I am currently in discussion with the retailer and more importantly JVC to resolve the HDR limitations of the current N range of projectors. I expect that a Lumagen purchase will be necessary to achieve what I believe the NX9 should achieve out of the box – but another £6,000 on top of over £18,000 seems unacceptable to me!

And where we go in the future with HDR10+ and Dolby Vision just does not bear thinking about. The industry really needs to get its act together – surely we have all learnt something from the format wars of the past. Just imagine where we could be if we all cooperated and collaborated and kept the customer's satisfaction as the focus of the businesses that support this industry.

Tony Phillips

Mark Craven replies: Our reviewers repeatedly note that the HDR 'experience' from a projector is a lot different to that of a TV, due to limitations in available brightness putting a greater emphasis on tone mapping. With affordable models it's an easier pill to swallow, but I can understand why you'd expect a knockout performance from your very expensive (8K upscaling!) JVC.

As you note, the 'blame' here doesn't lie solely with the hardware manufacturers. The way studios are implementing HDR creates an uneven playing field. Perhaps if all HDR software was mastered on the same monitors/systems and to the same peak brightness it would improve the situation. Do let us know if you decide to shell out for the Lumagen!

I want more monitors

Jon Thompson's article [*In the Mix*, HCC #300] got me to thinking about how much of my expensive TV I never use – I have a Sony 75ZD9 LCD TV of which I probably only use one third of its capabilities.

Assuming you split the TV into Picture, Sound and Smart functions, the only part I use is the picture, which is excellent. I've never used the in-built speakers as I have a surround

Star Letter...

3D hasn't failed, it's niche!

I loved the article on 3D movies in the last issue [HCC #300]. I believe that 3D was written off too quickly when it failed to become a mainstay of everyday TV viewing. But rather than a failure, we should see it as a format that ultimately succeeded as a niche product.

Look at other niche products, such as Japanese food, craft beers or Italian supercars. They have market shares of less than 5 per cent but no one is writing them off as doomed or obsolete. In many respects, 3D became a niche product for high-end video. Admittedly it's a product that requires a bit of extra effort, with the need for specs and large screens, but then it's fully capable of delivering outstanding images.

There is lots of evidence that other people agree with this view. For example, nine of the top 10 movies at the box office last year were offered in 3D (the 10th was *Deadpool 2*). Also, cinema chains continue to support the format by adding 13 per cent more 3D digital screens in 2018 and they now account for 58 per cent of screens worldwide. Closer to home, Sky Cinema has its own dedicated section for 3D movies. Not just the ones accidentally discovered such as *Captain America: The Winter Soldier*, *The Meg*, *Skyscraper* and *MI: Fallout* but 41 movies ready to download (see TV Guide/Sky Cinema/Browse/3D).

My early attempts at 3D at home were okay but not great. Eventually I realised the projector was struggling to bounce the sync signal off the screen back to the specs. By boosting the 3D signal with a separate IR emitter I saw a huge improvement in clarity/crosstalk. Re-watching *The Life of Pi* in 3D was a jaw-dropping experience, unlike anything one could see in 2D. Along with



the opening scene in *Hugo* it is now my favourite 3D demo disc.

Nowadays, before I buy a movie I will read the reviews to see if a 3D version is available and if it is well made. Sure, the studios may charge a bit more but they know the value is still there. Going forward, if we treat 3D movies as a high-end niche product rather than a failed mainstream one, I think we'll be able to buy it for years to come.

Ion

Mark Craven replies: Glad you enjoyed the article Ion, and I agree with you that we should consider 3D a 'high-end' niche format – to get the best out of it (especially now that 3D TVs are off the market) requires a committed user. And I know that describes a lot of HCC readers.

Whenever we can, we'll continue to fly the 3D flag – as do commercial cinemas and film studios. I also have my fingers crossed that one day an autostereoscopic 3D display might arrive that'll bring the format to the forefront of consumers' minds. But I've had those fingers crossed for so long I'm beginning to get cramp...

Star letter-writer Ion grabs Second Sight's brand new Limited Edition Blu-ray releases of *The House That Dripped Blood* and *Asylum*. This pair of classic Amicus horror films are available to own on Blu-ray from July 29, each accompanied by extras including commentaries and interviews. Both Limited Edition Blu-rays also boast an exclusive slipcase featuring new artwork by Graham Humphreys, a 40-page booklet and a reversible poster.



Life of Pi 3D: 'A jaw-dropping experience', says Ion

Sweet!

78 LETTERS



Sharp's LV-70X500E was an 8K 'monitor'

sound system. I tried using the smart functions but between the dubious Android system and the TV taking ages to find the network, and randomly dropping it, I gave up. I now use an Apple TV 4K box, Wi-Fi connected, which has never given me a problem.

Why are there not more 'simple' monitors for sale? I realise there are different panel specs, edge-lit, backlit, number of backlit zones, etc, but how much does the actual LCD or OLED panel evolve over a few years? I know picture processing is constantly improving but could this not be placed in an external box with the HDMI ports? Some boxes could be provided with Smart TV functionality, like Samsung has done with some of its TVs, and you just buy the functionality you require. My understanding was that LG manufactured virtually every OLED panel and the only difference was the re-sellers' picture processing which distinguished their TVs. I'm obviously no electronics expert but how much of this really needs to be built into the panel? If you need sound, buy a separate soundbar – it seems a lot of people are doing this anyway!

Surely this approach could cut down on waste. If you want to upgrade the processing or additional smart functions just buy a new external box, but don't throw away the panel. If a manufacturer decides to switch from Dolby Vision to HDR10+ just buy a new box. Perhaps, and I know this would never happen, there could be a standard interface so you could buy an LG panel, Sony external processing, Apple TV and a Samsung soundbar!

I guess a lot of people just buy a TV, stick it on a cabinet and never even adjust the picture settings. For these people manufacturers could sell a bundle (panel, external box, soundbar). But for those that already have decent sound, etc, they can pick and choose.

I'm sure I'm really missing a very good reason why this approach will not work,

probably something to do with profit loss, but can you give me your thoughts?

Gary Thomas

John Archer replies: In principle what you suggest makes perfect sense. In fact, I've seen a few TVs ship with external connection and processing systems over the years. Samsung in particular has pursued the idea extensively, first with 'Evolution Kits' and more recently with potential replacement connection boxes.

The Evolution Kits slotted into the back of compatible Samsung sets, upgrading their features and operating systems. While Evolution Kits were launched in 2013, 2015 and 2018, though, Samsung seems to have essentially ditched them now, citing, interestingly, lack of consumer interest. At £300 or so a time, I guess consumers couldn't afford them – or simply accepted the limitations of their TVs.

Mark Craven replies: We've seen monitors (e.g. TVs without tuners) before, but I can't recall a display without built-in speakers. However, I kinda like your idea, particularly with the proliferation of soundbars at various price points (often from TV makers).

Unfortunately, I'm certain that hiving off processing and audio from the display would lead to an increase in manufacturing costs, so your idea is an AV dream that'll (probably) never become a reality... ■

Contact us...

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Certified: AV-Holic!

With the help of some local professionals, *HCC* reader Gary has achieved his long-held dream of having his own personal picture palace



Gary runs a 7.2.4 audio system

Welcome to the AV-Holics Hall of Fame – introduce yourself!
Hi. I'm Gary Congram, I'm 65 and retired.

How long have you been into home cinema?
Since around 1982 when the first *Star Wars* LaserDisc came out and I heard it being demonstrated in a hi-fi shop. The first setup I had was from Rayleigh Hi-Fi, and consisted of a Denon amp, Miller & Kreisel THX speakers, REL subwoofer, Ferguson VHS player, Sony CD player and a TV.

When did you decide to set up your current cinema room?
It's has been my dream to have a cinema room since I went to Saturday Morning pictures at the Finsbury Park Odeon around 1962. When we moved house in 2015, we had plans to extend the house and the cinema and foyer were critical to the design – they were the number one requirement of the architect.

What kit's in your current cinema setup?
All my speakers are from Revel: F206 floorstanders for front L/R, a C208 centre, four in-ceiling models for Atmos, four in-walls for surrounds, and two B110 subwoofers. My receiver is an Anthem MRX-1120.
I have a 9ft fixed-frame projector screen used with an Optoma UHD51 projector (which



A foyer was a key requirement

has replaced the DH400 shown in these pictures), and a Panasonic DMP-UB900 UHD player and Sky+HD box. Also in the system is an Innuos ZEN MKII 4TB music server and DVDO 4K scaler, plus Rako lighting.

Did you get any help from professionals?
Yes. Audio Images in Lowestoft put together the system and lighting, while the wall unit, decoration and electrics were handled by local tradesmen. I was surprised by what was available locally and the excellent quality of their work.

What's your verdict on the room's performance?
During the build process Audio Images helped by lending equipment that I could install to find optimal positions for speakers in relation to seats, etc. I found that keeping all the decorations in the room to the rear allowed the sound to reverberate to the



listening positions and stop. Strips of anaglypta wallpaper are great at dampening echoes so these are near the seats.
Employing or buying from local traders allowed me to interact with them, thereby ensuring all was as I expected. As a result the room is perfect for music, movies and good for general TV via Sky.

Would you do anything differently if you were to design the room again?
I'd move the projector out of the cinema room and into the foyer. I should also have had a raised dias installed to accommodate more viewing options, and would have built in quiet air conditioning.
What was the last bit of kit you added to the setup?
I love the original setup so much that I haven't replaced anything yet!



What's your favourite bit of hardware and why?
The Anthem amp does a fantastic job, whether that is stereo music, old stereo movies or any number of speakers up to 7.2.4.
Do you have your eyes on any hardware upgrades?
I'm always reading reviews in *HCC* and online, looking for equipment that can improve what I have. I'm considering a new projector as the Optoma UHD51, while great for movies, doesn't get the most from sports from Sky

(shadows around moving objects, especially in close ups).
When the cinema was built I had wiring installed so that a TV could be used as a contingency should the projector fail, so I am also looking at TVs larger than 65in.

What do friends and family think of the cinema room?
They think I am extremely lucky to have it and all say if it was theirs they would never leave the room. They find the Stressless recliner seats very comfortable – but not too relaxing that they fall asleep.

How often does the cinema room get used?
Around 4-5 hours a day – even longer during big sporting events like Wimbledon and the Olympics, or when we have friends staying with us.

What discs do you use to show off the system?
I have over 6,000 CDs on my Innuos server, so I can normally play a track of the person's favourite artist. Otherwise I use a mixture of both CD and Blu-ray, including 10cc's *Une Nuit a Paris*, Robert Miles' *A New Flower*, *Hanuman* by Rodrigo Y Gabriela, the start of *Spectre*, *Pan* (3D), *Avatar* (3D) and the *Mountains* episode of *Planet Earth II*.

And what are your top 5 favourite films?
Very hard to choose but at a push: *Black Panther* (3D), *Lord of the Rings: The Two Towers*, *Star Wars: A New Hope*, *Star Trek Beyond*, *Guardians of the Galaxy* (3D).

Do you stream movies and TV from Netflix, Amazon, Sky, etc?
We live in the country so our broadband speed is not good enough for streaming. The quality of the picture and soundtrack is better on recorded media ■

Share your cinema system in the mag!

If you want to be in *HCC*, you'll need to send us some hi-res images of your cinema room. Here are a few tips...

1. Go big. Set your camera to take images at the largest possible size, and at the highest resolution. Don't worry about cropping or resizing – we will make them print-ready.
2. Get in focus. Make sure your photos are as sharp and clear as possible. If you have one, use a tripod, or place your camera on a flat, steady surface and take pictures on a delay. The sharper they are, the bigger we can print them.
3. Let some light in. While we tend to watch

movies in the dark, our cinema systems look their best when they are lit. If you can shoot with natural daylight, do so. If your room doesn't get a lot of light (a garage conversion, for instance) then switch on whatever lights are fitted. Avoid using flash wherever possible.
4. Be thorough. Send photos of as much of the room as possible. Images of both the front and back of the room, the kit rack, speakers, seating, disc shelf, movie poster art... The more the merrier.

5. Don't be shy. Send a picture of yourself!
6. Show us more. Got pictures of your room before it was a cinema? Or snaps of work being done? We love to see these, too.

Now what?
Email your images to letters@homecinemachoice.com with the subject heading 'AV-Holic', and provide your answers to the relevant questions above – then we'll be in touch!



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PLAYBACK

→ **SOFTWARE HIGHLIGHTS** US Jordan Peele's latest horror smash will leave you seeing double **CAPTAIN MARVEL** Girl power lights up the 1990s in this superhero buddy movie **THE MULE** Clint Eastwood's drug trip lands on Ultra HD Blu-ray **CREATURE FROM THE BLACK LAGOON: LEGACY COLLECTION** Trio of classic monster movies washes up on BD & MORE!

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Holy Bat-birthdays! The Dark Knight turned 80 this year (he's surprisingly spry for his age) and Warner Bros. decided to celebrate by bringing four classic Bat-flicks to 4K Blu-ray for the first time ever. Head over to p90 to see if they were worth the wait...

HCC RATINGS KEY...

Outstanding	★★★★★
Above average	★★★★
Acceptable	★★★
Disappointing	★★
Dire	★

All prices quoted are approximate and may have changed

The family that stays together slays together...



The (doppel)gang's all here!

Jordan Peele tackles the enemy within in this twisted take on the home invasion thriller



→ Us

Following the critical and commercial success of his Oscar-winning directorial debut, *Get Out*, filmmaker Jordan Peele returns with another smart, shocking and darkly funny slice of allegorical horror.

Us follows middle-class parents Adelaide and Gabe Wilson (Lupita Nyong'o and Winston Duke) as they head to their lake house in Santa Cruz with their kids Zora and Jason (Shahadi Wright Joseph and Evan Alex). But what should be a relaxing holiday takes a terrifying turn when the house is attacked by four strangers who look just like them...

Picture: Shot digitally at 3.4K, but finished as a 2K Digital Intermediate, *Us* arrives on Blu-ray with a sensational 2.40:1-framed 1080p encode.

As you would expect from a modern production, the daylight sequences (such as Chapter 5's visit to the beach) look absolutely immaculate; bright and crisp, with superb colour saturation and plenty of textural information packed into every frame.

However, it's the AVC encode's handling of the many night sequences that impresses the most. Not only are black levels exquisitely deep, but the exceptional clarity and total lack of crush ensures there is plenty of detail lurking in the shadows. And no matter how dark things get, colours are still richly rendered, as seen most clearly in the red jumpsuits the doppelgängers all wear.

Audio: It may not be the most bombastic mix you'll ever listen to, but the Blu-ray's Dolby Atmos track is still an absolute killer.

Things get off to a great start with the opening fairground scenes, which use precisely placed cues to locate you in the heart of the action. As the young Adelaide then wanders off into the 'Vision Quest' hall of mirrors (Chapter 2), the setting's ominous nature is further enhanced by a more unpredictable deployment of animal calls and other ambient effects around the soundstage (including subtle but effective use of the height layer).

Like any good fright film, *Us* bolsters this sense of immersion with an impressive dynamic range that allows the carefully judged sound design to move effortlessly from quiet intimacy to something much louder and in-your-face.

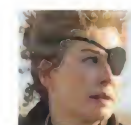
Extras: Universal's track record with extra features has been pretty spotty of late. And while this Blu-ray continues down the same path of a bunch of short featurettes rather than a single substantive *Making of...*, the good news is that these are a bit more in-depth than most.

The Monster Within Us (five minutes) focuses on the cast and characters; *Tethered Together: Making Us Twice* (seven minutes) highlights the difficulties of having actors play two characters; Jordan Peele discusses his relationship with horror films in *Redefining a Genre...* (six minutes); and *The Duality of Us* (10 minutes) explores the film's themes.

Also included is footage of Lupita Nyong'o staying in-character between takes; three short vignettes about the making of key scenes; six deleted scenes; an outtakes reel; and the full-length version of the film's *Pas De Deux* dance sequence. **AvB**

A Private War

Altitude → Region B BD
£18



This dramatisation of the last 10 years in the life of the celebrated *Sunday Times* war correspondent Marie

Colvin is a cut above the usual Oscar-bait biopic. Surprisingly unsentimental and psychologically complex, Colvin's story is brought to the screen in sophisticated style by Matthew Heineman's assured direction and a career-best performance by Rosamund Pike. This Blu-ray release delivers proficient 2.40:1-framed 1080p digital visuals, powerful DTS-HD MA 5.1 sonics that work hard to bring the film's war zones to life, two brief featurettes and a more rewarding 38-minute Q&A. **AvB**



Escape Room

Sony Pictures → All-region BD
£25



A teen-friendly mix of *Cube* and *Saw*, this horror-thriller traps six strangers in a series of locked rooms and forces

them to solve puzzles to escape or face the very lethal consequences. Director Adam (Insidious: The Last Key) Robitel keeps things fun and tense, but he clearly couldn't do anything about the script's idiotic final act. Whatever you think of the film itself, *Escape Room*'s crisply defined 2.40:1 Full HD visuals and immersive DTS-HD MA 5.1 audio make for a technically impressive Blu-ray experience. Modest extras include an alternate opening and ending. **AvB**



American Gods: Season Two

Studiocanal → Region B BD
£35



After an absence of nearly two years and some well-publicised production troubles, the TV adaptation of Neil Gaiman's acclaimed fantasy novel finally returns for a second season.

Was it worth the wait? Not really. Although there are occasional flashes of both the brilliance of the source material and stylistic flourishes of the first season, this new eight-episode run proves curiously aimless and lacks narrative momentum. On a more positive note, the Full HD visuals are gloriously vibrant and the DTS-HD MA 5.1 mixes are playful. The three-disc set also hosts a Comic Con panel and a chat with Gaiman. **AvB**



The drugs don't work for Clint

Tone-deaf tale of a geriatric drug-runner provides few highs for Eastwood fans

→ THE MULE

Estranged from his family and with his horticultural business facing foreclosure, octogenarian Earl Stone (Clint Eastwood) can't believe his luck when somebody offers to pay him for driving cargo from one place to another, no questions asked.

When he finds out that he's actually working as a drug mule for a Mexican cartel, Earl doesn't mind; after all, the money he's making is allowing him to help friends and family members in need. But, as a DEA task force gets ever closer, it looks like the good times might not last much longer.

Reuniting Eastwood with *Gran Torino* writer Nick Schenk, *The Mule* is yet another chance for the actor to play a cantankerous, casually racist war veteran whose life is changed by a chance encounter with gang life. But *The Mule* lacks the depth of that earlier collaboration, resulting in a lightweight story whose attempts to find redemption for Eastwood's character feel half-hearted at best. Sadly, this mule has very little kick to it.

Picture: Shot digitally at below-4K resolution for a 2K DI (according to data on the IMDb), *The Mule* lands on 4K Blu-ray looking crisp and clean, but not extravagantly sharp versus the solid 1080p release. There's a greater sense of image density, and finer details in close-up shots, but for much of the time the boost is marginal.

As expected, it's the HDR10 grade that makes more of a difference – the 2.40:1 visuals, be they desert highway exteriors or interior shots, have a greater balance between light and dark, and a more naturalistic feel to accompany the unflashy



cinematography. Colours, while muted for much of the time, have a little more pop too.

Audio: *The Mule*'s DTS-HD Master Audio 5.1 track (4K and Full HD) is a technically proficient but thoroughly unexciting affair. The L/C/R spread feels reasonably wide, with dialogue prioritised at all times. However, very little use is made of the surround channels beyond some subtle ambience. Even a stash-house raid (Chapter 8) fails to add any excitement to things, although the sudden arrival of a helicopter (Chapter 13) does bring some much needed dynamism to the mix.

Extras: There are no extras at all to be found on the Ultra HD platter – not that the accompanying Full HD Blu-ray fares much better. A standard-issue *Making of...* featurette (11 minutes) and a music video (three minutes) are all that's on offer. Considering the film was inspired by a true story, you might have expected a little more detail. **MC & AvB**



Dianne Wiest, Alison Eastwood and Taissa Farmiga play Earl's estranged ex-wife, daughter and granddaughter

HCC VERDICT

Us

→ Universal Pictures → All-region BD
→ £25

WE SAY: Jordan Peele's supremely satisfying sophomore effort looks and sounds scarily good in HD.

Movie: ★★★★★

Picture: ★★★★★

Audio: ★★★★★

Extras: ★★★★★

OVERALL: ★★★★★

HCC VERDICT

The Mule

→ Warner Bros. → Ultra HD Blu-ray
& All-region BD → £30

WE SAY: Eastwood's first screen role since 2012 is a let-down, and the 4K BD is not much of a sweetener.

Movie: ★★★★★

Picture: ★★★★★

Audio: ★★★★★

Extras: ★★★★★

OVERALL: ★★★★★

Arcade Action

Bigscreen home entertainment isn't just about movies anymore. **Rik Henderson** checks out a videogame vying for time on your home cinema system...



Warhammer: Chaosbane

Bigben Interactive → PS4, Xbox One, Windows PC → £50

There have been plenty of videogames based on the *Warhammer* series of tabletop skirmish and RPGs, but few feel as close to the source material as...*Chaosbane*. That's partly because it is an isometric action role-player with small characters that remind us of Games Workshop miniatures, and partly because it favours simple combat over puzzles.

Some might say this is a *Diablo* clone. However, it reminds us more of *Baldur's Gate: Dark Alliance* and that game's PS2 sequel from the early 2000s. You're set relatively linear missions and must hack 'n' slash/magic your way through them. Even the dungeons you have to explore are similarly repetitive. But the biggest comparison is that, no matter how often you are asked to trudge the same paths, the game is undeniably fun.

There are four player-character classes available, each available for single-player use or local/online co-operative play. You can opt for Konrad Vollen, an Imperial soldier; Elontir, the high-elf mage; Bragi Axebliter, a dwarven slayer; or the wood-elf scout Elessa.

Each has his or her individual talents and abilities – the soldier prefers close combat, while the mage is best suited to staying out of fist fights in order to rain down spells on foes instead. When combined in a co-op game, they work well. It's a little trickier to play as anyone but Konrad in solo mode, but it's well worth having a go in order to make the action more varied and interesting.

Regardless, it's easy to drop in and out of multiplayer games and, in many ways, it feels like an advanced version of *Gauntlet* when you do – albeit, without the 'elf needs food badly' banter.

In a home cinema sense, *Warhammer: Chaosbane* is nothing really to write home about. There is no 4K mode on consoles, for example. HDR support is missing too. It does run at 60 frames-per-second on the top-end devices, but you most definitely won't be using it to show off your AV system.

Still, that's not really the point of the game. It's more an excuse to vent your anger by button-mashing your way through hordes of monsters. And, in that capacity, it does an admirable job.



Two Films by John Woo

Eureka Classics → Region B BD
£28



Eureka's ongoing journey through Asian action cinema comes up trumps once again with this Blu-ray set housing stunning new 2K restorations of two early John Woo movies.

While the presence of Jackie Chan and Sammo Hung in its cast makes 1976's *Hand of Death* the more high-profile of the pair, the run-of-the-mill story and staging means the film plays a distant second to Woo's superb 1979 swordplay bromance *Last Hurrah for Chivalry*. As well as multiple audio options, each disc also includes a commentary, trailer and interview with Woo. **AvB**



Early Women Filmmakers 1911-1940

BFI → Region B BD
£50



Given the ongoing talk about the disparity between male and female directors in Hollywood, this BFI boxset is a reminder that it wasn't always this way. Spreading 22 films (running

over 10 hours) across four discs, it highlights the pioneering, innovative and influential work of nine female filmmakers working between 1911 and 1940. Given the age of the films it's no surprise that the restorations still exhibit large amounts of damage, but the underlying fundamentals are very good. Informative extras include short featurettes about three of the filmmakers and a collection of enlightening essays. **AvB**



The Running Man

Fabulous Films → All-region BD
£16



Never regarded as one of Arnold Schwarzenegger's best actioners, 1987's *The Running Man* is one of those rare films that improves with age; its sociopolitical satire cuts much

closer to the bone today. Based on an off-the-shelf HD master, this Blu-ray's 1.78:1-framed 1080p encode looks a little rough around the edges in places, but colours are rich and detailing is good. A lossless stereo track is joined by a dynamic DTS-HD MA 5.1 mix. Bonus goodies include chat-tracks and featurettes dealing with civil liberties and reality TV shows. **AvB**



4K
ULTRA
HD



The past's so bright,
I gotta wear shades...



Ground zero superhero

Neither this comic book flick nor its Ultra HD Blu-ray release quite live up to the title billing

→ CAPTAIN MARVEL

While not the best film to emerge from the Marvel Cinematic Universe, *Captain Marvel* does slot nicely into the series' lore. After all, as well as handily introducing a character with some bonus superhero talents to help battle Thanos in *Avengers: Endgame*, the film also works as a solid origin movie for various key Marvel characters and organisations – notably Nick Fury and S.H.I.E.L.D.

Both Brie Larson and the script are pretty effective. Larson is charismatic enough to carry the lead role (though she is frequently upstaged by Samuel L Jackson and a cat), and the narrative does a deft job of balancing Captain Marvel's own backstory with a wider intergalactic plot about warring alien species.

There isn't the slickness or wit of the best Marvel flicks, and it strains for emotional pay-offs without always finding them. Nonetheless, only members of the online hate brigade who took umbrage to the idea of a female-led superhero movie won't be at least pleasantly entertained.

Picture: Despite 6.5K and higher resolutions being deployed during the shoot, the 4K BD picture sometimes looks slightly soft. It seems to be an upscale of a 2K DI, and its bit rate generally runs lower than that of the best-looking Ultra HD discs.

Even at its worst, though, the 4K encode looks cleaner and more detailed than the Full HD Blu-ray. It's also bolstered by an attractive HDR10 master that pushes daylight scenes to consistently high levels of brightness while opening up the dynamic range of dark and interior sequences.

Some scenes adopt a slightly darker average light level than they do in the 1080p version. Most HCC readers, though, will likely take this occasional reduction in brightness in return for the generally wider light range.

Audio: Like its 4K visuals, *Captain Marvel*'s Dolby Atmos soundtrack is satisfying rather than reference. Fortunately it boasts more dynamic range than some previous Disney releases, as well as making more consistent use of rear and height channels for spot effects, transitions and general ambience.

There's some striking LFE, too.

Voices sometimes feel isolated from the mix, though, and one or two scenes can sound a little shrill. That said, it's still a step-up from the Full HD platter's DTS-HD MA 7.1 track.

Extras: 25 minutes of behind-the-scenes featurettes explore the film's story, casting and co-directors, as well as Captain Marvel's comic book heritage. More interesting are nearly 10 minutes of deleted scenes, a short but sweet gag reel, and a droll '80s-style look at Goose the cat. **JA**



Lashana Lynch (above) and Jude Law (below) join in the comic book fun...



HCC VERDICT

Captain Marvel

→ Walt Disney → Ultra HD Blu-ray & All-region BD → £37

WE SAY: A solid transfer of a solid Marvel movie, but you can't help feel Disney could have tried harder.

Movie: ★★★★★

Picture: ★★★★★

Audio: ★★★★★

Extras: ★★★★★

OVERALL: ★★★★★



Magic, murder and politics

Can a deluxe German release lift Richard Stanley's second film from obscurity?

→ DUST DEVIL: LIMITED COLLECTOR'S EDITION

Fresh from the success of his sci-fi horror debut *Hardware* (1990), filmmaker Richard Stanley returned to his South African roots for a deceptively simple tale. Chelsea Fields stars as Wendy, a young woman fleeing a failing marriage who picks up an enigmatic hitchhiker (Robert Burke) on the road to Namibia. Wendy doesn't know that her new travelling companion harbours a terrible secret, leaving a trail of ritualistic murders wherever he goes.

Plagued by production problems and hacked about by producers on both sides of the Atlantic, by all rights *Dust Devil* should be a complete mess. Indeed, the truncated cuts released in most territories are just that. Thankfully, Stanley was eventually able to get his hands on the materials needed to create something far closer to his original concept. What emerged was a genuinely unique film; a visionary genre mashup that combines African mysticism and politics with serial killer tropes and stylish callbacks to Sergio Leone's Westerns. Simply astonishing.

Picture: The set's Blu-ray disc houses both Stanley's 108-minute 'Final Cut' and the 87-minute German theatrical release or 'Kinofassung', which appears to be the notorious Miramax US re-edit, only with some of the trimmed nudity and violence added back in.

Framed at 1.78:1, the former is a vast improvement on previous DVD releases. The increased clarity and sharpness reveals far more textural details in the photography. The encode also copes very well with the film's highly stylised palette, which regularly prioritises vivid yellow and orange tints.



Framed at 1.66:1, the shorter cut doesn't stack up quite so well, appearing softer with flattened shadows and less vibrant colours.

Audio: Both cuts feature a choice of English and German DTS-HD MA 2.0 soundtracks. For the most part they serve the film (and Simon Boswell's superb score) very well, setting up a fairly wide and active stereo spread. However, dialogue is a little muffled on some occasions.

Extras: In addition to a DVD of the 'Final Cut', the set also includes a 10-track 'Soundtrack Selection' CD, plus two bonus DVDs. These house the 114-minute Workprint; new interviews with Stanley and actress Marianne Sägesbrecht (the only extra in German); material from his original 16mm version; and three of Stanley's documentary features – *Voice of the Moon* (1990), *The Secret Glory* (2001), and *The White Darkness* (2002). Stanley has also recorded new chat-tracks for *Dust Devil* and the three docs. **AvB**



HCC VERDICT

Dust Devil: Limited Collector's Edition

→ Koch Media → All-region BD & RO DVD → £30 (German Import)

WE SAY: The definitive edition of this cult classic – and it's pleasingly English-friendly as well.

Movie: ★★★★★

Picture: ★★★★★

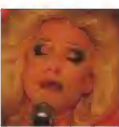
Audio: ★★★★★

Extras: ★★★★★

OVERALL: ★★★★★

Hedwig and the Angry Inch

The Criterion Collection → Region B BD £28



Writer-director-actor John Cameron Mitchell and composer Stephen Trask delivered one of the few truly great movie musicals of the 21st century with this funny and heartbreaking tale of an East German 'genderqueer' punk trailing the rock star ex-boyfriend who stole her songs across the US. Newly restored in 4K, Criterion's Blu-ray works wonders for the film's grainy-yet-colourful aesthetic, while the DTS-HD MA 5.1 brings the music to life with plenty of verve. Insightful extras include a commentary and an hour-long cast and crew reunion video. **AvB**



The Sender

Arrow Video → Region B BD £25



Having worked in the art department on the likes of *Star Wars* and *Alien*, Roger Christian made the leap to directing with this atmospheric 1982 psychic thriller that comes off like a strange mix of *Scanners* and *One Flew Over the Cuckoo's Nest*. Based on an HD master supplied by Paramount, Arrow's 1.78:1 Full HD encode looks reasonably healthy, despite some obvious dirt and debris in the image. Bonuses include a commentary by Christian, an overview of the psychic horror film sub-genre by critic Kim Newman, and script extracts for several unfilmed scenes. **AvB**



Vanishing Point: 2 Disc Edition

Fabulous Films → Region B BD £20



Attempting to describe the plot of this 1971 cult classic is pretty much pointless – it really is just a 100-minute car chase across the US. For this UK outing, Fabulous Films has taken Fox's decade old US single-disc release and spread the contents across two platters instead. The first disc houses the 98-minute US theatrical cut (with optional commentary and picture-in-picture interviews); the second the 106-minute UK version, plus a smattering of so-so extras. Given its age, and despite some sharpening, the film's HD master holds up surprisingly well. **AvB**



What Men Want

Paramount → R2 DVD £15



This gender-flipped version of the 2000 Mel Gibson comedy stars Taraji P. Henson as a sports agent who can't break through the glass ceiling until she gains the ability to read men's minds. Just like the original, this do-over is only fitfully amusing, but is made harder to watch by the shrieking and shouting that constantly fills the DVD's Dolby Digital 5.1 soundtrack. Still, it could've been worse – in his intro to the disc's deleted scenes, director Adam Shankman reveals his original cut ran to almost three hours. At least it looks pretty good, thanks to the DVD's richly coloured 2.40:1 transfer. **AvB**



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Bats all, folks!



The Caped Crusader's original quartet of bigscreen adventures gets astonishing visual and aural upgrades...

HCC VERDICT

Batman
→ Warner Bros → Ultra HD Blu-ray & All-region BD → £30
WE SAY: Burton's *Batman* has never looked or sounded better than it does on this 4K do-over.

Movie: ★★★★★
Picture: ★★★★★
Audio: ★★★★★
Extras: ★★★★★
OVERALL: ★★★★★

DISC OF THE MONTH

HCC VERDICT

Batman Returns
→ Warner Bros → Ultra HD Blu-ray & All-region BD → £30
WE SAY: This superb UHD release perfectly complements the film's expressionistic visuals.

Movie: ★★★★★
Picture: ★★★★★
Audio: ★★★★★
Extras: ★★★★★
OVERALL: ★★★★★

HCC VERDICT

Batman Forever
→ Warner Bros → Ultra HD Blu-ray & All-region BD → £30
WE SAY: Over-the-top visuals and bombastic audio, which can prove an exhausting experience.

Movie: ★★★★★
Picture: ★★★★★
Audio: ★★★★★
Extras: ★★★★★
OVERALL: ★★★★★

HCC VERDICT

Batman & Robin
→ Warner Bros → Ultra HD Blu-ray & All-region BD → £30
WE SAY: Awesome 4K HDR pictures and Dolby Atmos sound don't make this terrible film any better.

Movie: ★★★★★
Picture: ★★★★★
Audio: ★★★★★
Extras: ★★★★★
OVERALL: ★★★★★

→ BATMAN, BATMAN RETURNS, BATMAN FOREVER AND BATMAN & ROBIN

With Tim Burton's *Batman*, comic book fans finally got the adult adaptation of the Dark Knight they craved. Michael Keaton delivers plenty of angst in the title role, while Jack Nicholson channels Caesar Romero as a film-stealing Joker.

Batman Returns is pure Burton: a majestic Gothic fantasy that happens to star a masked vigilante who dresses like a bat (Keaton again). The resulting film borders on the grotesque, thanks to Danny DeVito's disturbing Penguin and Michelle Pfeiffer's twisted take on Catwoman.

The more kid-friendly *Batman Forever* saw Burton replaced by Joel Schumacher and Val Kilmer donning the cowl. The darkness has gone, replaced by comic book angles, day-glo neon, an over-the-top rogues gallery, and nipples on the Batsuit.

Which brings us to *Batman & Robin*. George Clooney replaces Kilmer, and the rest of the cast is composed of whoever was popular at the time. The camp factor is set to eleven, every other line of dialogue is a terrible pun, and the plot is so bad it insults the intelligence of its teenage target audience.

Picture: Holy pixels, Batman! Warner Bros. has done an outstanding job of restoring all four films, with native 4K scans of the 35mm camera negatives and a sympathetically applied HDR10 pass.

The included 1080p discs also benefit from new transfers, but in direct comparison the 4K platters have significantly increased levels of detail, more saturated colours, brighter highlights, and perfectly defined shadows and blacks.

Batman has never looked better, with remarkable detail, beautifully rendered blacks, and gorgeous colours that really pop. There are occasional soft shots but these are the result of production issues rather than the presentation.

Batman Returns looks equally impressive, with its expressionistic photography taking full advantage of the increased dynamic range. Blacks are incredibly deep yet nuanced, and the frequent HDR highlights retain real impact.

Batman Forever and *Batman & Robin* both boast extensive use of neon lighting, spotlights and searchlights, which the HDR grades deliver with blinding precision. The colour palettes are also



Look what the cat dragged in...

amped up, and the wider gamut on the UHD versions results in amazingly saturated images.

Audio: Riddle me this, riddle me that, what sounds better than an object-based track? The answer is: not much. Warner has pulled out all the stops on the audio side, with brand-new Dolby Atmos remixes for each of the four films. These immersive tracks are also included on the Full HD Blu-rays, and the studio has finally encoded its discs to default to the Atmos mix, rather than DTS-HD.

Apparently the post-production schedule on *Batman* was extremely tight, so Tim Burton has taken the opportunity now to create a completely new soundmix. The resulting track spreads Danny Elfman's iconic score across the front of the room, while throwing in well-defined gunshots, clear dialogue, some decent bass, and a few choice overhead effects like the Joker's helicopter.

Batman Returns was the first film to be released in Dolby Digital and this new Atmos mix takes that original soundtrack and embellishes it with full-bodied bass (the Batmobile has a throaty roar) and plenty of overhead action (the Batboat blasting down the sewers being a great example).

The latter two films have soundtracks as over-the-top as their visuals, and the Atmos mixes make full use of all the channels to deliver an exhausting sonic experience. There's prodigious amounts of low-end info, lively surround effects, and some impressive height-channel detail. However, in amongst this whirlwind of effects, dialogue remains clear so you won't miss a single dreadful gag.

Extras: All of the bonus features are on the included Full HD discs and – while extensive – none are new. In fact, they were all produced for the 2005 *Batman: The Motion Picture Anthology 1989 - 1997* DVD set, which is why they're presented in standard-def.

The highlight is *Shadows of the Bat: The Cinematic Legacy of the Dark Knight*, which runs across all four discs and covers each film's production in detail. There are also additional featurettes, music videos, trailers, and, in the case of *Batman Forever*, quite a few deleted scenes.

There are director commentaries for each film, too. While Burton's are a bit dry, Schumacher's are very enjoyable – in fact his anecdotes about the production and failure of *Batman & Robin* are far more entertaining than the movie. **SW**



Jim Carrey's Riddler joins Tommy Lee Jones' Two-Face in *Batman Forever*



'Allow me to break the ice'



Watching these old 3D movies is likely to make anyone go goggle-eyed...



Return of the Creature features

Three films, two discs, and one wonderful new treat for fans of classic stereoscopic cinema...

→ CREATURE FROM THE BLACK LAGOON: COMPLETE LEGACY COLLECTION

Marking the bigscreen debut of the last of the classic 'Universal Monsters', 1954's *Creature from the Black Lagoon* sees a group of scientists finding more than they bargained for while hunting fossils along the Amazon river. Directed by Jack Arnold and boasting one of cinema's most memorable monsters, this cracking creature-feature was a hit with audiences and it didn't take long for a sequel to materialise...

In *Revenge of the Creature* (1955), the Gill-Man is captured and put on display at a Florida Oceanarium, while being subjected to scientific experiments. Unsurprisingly, the creature doesn't take too kindly to this (can you blame it?) and soon escapes, going on the rampage and kidnapping the 'pretty young ichthyologist' (Lori Nelson) who has caught his eye. Rushed into production, the film is little more than a retread of the original and doesn't bring anything new to the franchise. Even so, it still did well enough to convince the studio to give the Gill-Man one more shot...

The Creature Walks Among Us (1956) puts the beastie in the hands of a mad scientist who wants to transform it into a land-dweller through surgery. It's a nutty concept, but one that both brings something new to the series while further underlining the creature's tragic nature. With no more sequels forthcoming, the film turned out to be a sad – but fitting – end for the misunderstood monster.



HCC VERDICT

Creature from the Black Lagoon: Complete Legacy Collection

→ Universal Pictures → All-region BD → £23

WE SAY: The sequel chat-tracks and 3D version of *Revenge*... make this set a worthy upgrade for fans.

Movie: ★★★★★

Picture: ★★★★★

Audio: ★★★★★

Extras: ★★★★★

OVERALL: ★★★★★

Picture: The first platter in this two-disc set is the same *Creature from the Black Lagoon* Blu-ray that Universal Pictures previously issued in its *Universal Monsters: The Essential Collection* boxset and as a standalone release (both 2012). As such, fans will already be familiar with what to expect from its 3D and 2D Full HD presentations.

The second disc houses both of the sequels, with *Revenge of the Creature* also available to watch in 3D as well as 2D. Unlike the original bodged US release (which used half-resolution side-by-side 3D encoding), this UK outing is the 'fixed' version and the stereoscopic encode is sharp, detailed and delivers a pleasing sense of depth to most of its visuals – although technical issues during the shoot have left several scenes looking unavoidably flat.

The 2D encode lacks the same visual punch. The image here is noticeably softer and less well defined. Thankfully, the same is not true of *The Creature Walks Among Us*, the only one of the trio not shot in 3D. That film's 2D encode is much better, with improved clarity and detailing throughout.

Audio: All three movies sport restored DTS-HD MA dual-mono soundtracks. The cleaned-up sonics are as good as you could really hope for, delivering clean dialogue, convincing sound effects and booming orchestral music cues.

Extras: *Creature from the Black Lagoon* carries the same old selection of extra features (commentary, retrospective featurette, photo gallery and trailers). Pleasingly, the sequels also get their own chat-tracks, as well as the expected trailers. **AvB**



Underrated or simply unworthy?

Arrow unearths three more 1970s cult curios for fright fans to sink their teeth into

→ AMERICAN HORROR PROJECT: VOLUME TWO

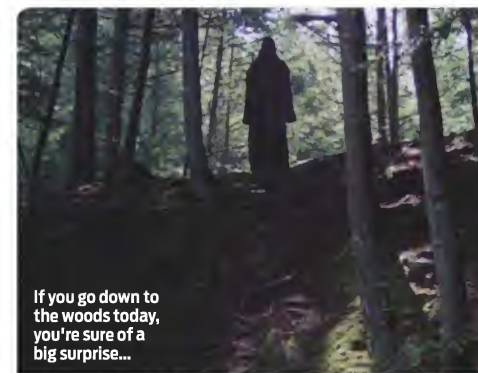
Three years on from the launch of the well-received first volume in its celebration of obscure and odd US horror cinema, Arrow Video is back with another trio of cult fright flicks co-curated by Stephen Thrower, author of *Nightmare USA: The Untold Story of the Exploitation Independents*.

First up is 1970's *Dream No Evil*, the tale of a young orphan woman with some pretty major daddy issues: she is convinced that he has come back from the dead and is killing people. Director John Hayes brings a welcome sense of dreamy lyricism to the story, but the sense of drifting in and out of reality is fatally undermined by a voice-over narration that keeps explaining what's real and what isn't. D'oh!

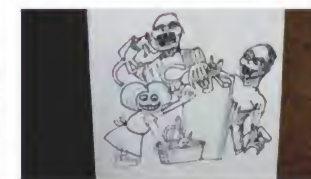
If you thought *Dream No Evil* was slow-moving, 1976's *Dark August* is positively plodding. However, it clearly works to the film's favour, giving this slice of Vermont folk horror about a hit-and-run driver haunted by occult forces the feeling of one of the BBC's old M.R. James adaptations. It's just a shame that nobody had any idea how to end the movie.

Finally, 1977's *The Child* is just your everyday story of an eleven-year-old girl who spends her time playing with face-munching zombies; using them, and other supernatural shenanigans, to kill people. Narratively incoherent, visually disorientating and boasting the downright oddest line-readings you'll ever hear, *The Child* is like some sort of insane fever dream. A true one of a kind, for better and worse.

Picture: *Dream No Evil* and *Dark August* were both restored from the original 35mm camera negatives



If you go down to the woods today, you're sure of a big surprise...



and appear here framed at 1.85:1. Image quality in both cases is pretty good, with strong colours and an organic grain structure. Any real issues (occasional softness, excessive grain in low-light settings) stem from the original photography.

The Child was restored from a 35mm CRI (Colour Reversal Intermediate) and can be viewed at 1.33:1 or zoomed in to 1.78:1. Clarity is a particular issue here, with darker scenes being almost impenetrable, while scratches and dirt are evident throughout.

Audio: The three LPCM mono soundtracks do the best they can with the source material, but don't expect miracles. *Dark August* arguably sounds the most 'professional' in quality, but even then a lot of the track is given over to the film's bizarre score (a recurring element across the three titles).

Extras: The expected assortment of commentaries, video appreciations and interviews. The boxset also houses an exclusive 60-page book. **AvB**

HCC VERDICT

American Horror Project: Volume Two

→ Arrow Video → All-region BD → £60

WE SAY: Weird? Yes. Wonderful? Not so much. Still, you can't fault the effort put into this boxset.

Movie: ★★★★★

Picture: ★★★★★

Audio: ★★★★★

Extras: ★★★★★

OVERALL: ★★★★★

A Case for a Rookie Hangman

Second Run → All-region BD → £20



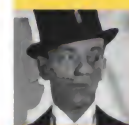
Pavel Juráček's surreal take on the third book of *Gulliver's Travels* makes an impressive showing on Blu-ray

courtesy of a new 4K restoration that has resulted in a beautifully rendered AVC 1.37:1-framed 1080p encode. Arguably more exciting is the presence of Juráček and co-director Jan Schmidt's sublime Kafka-esque 1964 short *Josef Kilian*, which has also undergone a 4K restoration and looks just as pristine as the main feature. Other extras include a fascinating podcast discussion of the film, two additional shorts and a 24-page booklet. **AvB**

★★★★★

Swing Time

The Criterion Collection → Region B BD → £28



The sixth (and possibly best) of the musicals starring the legendary duo of Fred Astaire and Ginger Rogers, *Swing*

Time waltzes onto Blu-ray with a superb hi-def package from Criterion. The new 2K restoration is a revelation: black levels are flawless, detailing is refined and contrast is stable. Sure, there are a few missing frames and small scratches, but what do you expect from a film that is over 80 years old? The LPCM 1.0 audio is similarly impressive. Bonus material includes an archival audio commentary, interviews, and a discussion of 'blackface' and its use in *Swing Time*. **AvB**

★★★★★

Kind Hearts & Coronets: 70th Anniversary Ed.

Studiocanal → Region B BD & R2 DVD → £30



A new 4K restoration of this exceptional Ealing comedy may seem like overkill given the quality of 2K polish that was the basis for the label's initial 2011 Blu-ray release

of the film. That said, this new 1.37:1 black-and-white 1080p encode looks simply magnificent. Studiocanal's bumper 'Collector's Edition' set carries across almost all of the key features from that earlier disc (only the radio essay and Douglas Slocombe interview are MIA), and adds a detailed 44-minute appreciation of the film and a short BFI intro to Ealing Studios. A poster and art cards are also included. **AvB**

★★★★★

A hell of a good time for everyone

The signs and portents bode very well for this charmingly British take on the end of the world

→ GOOD OMENS

Quirky and quintessentially British, this Amazon BBC co-production of the Terry Pratchett and Neil Gaiman tome is a spell-binding delight.

Set at the onset of the Apocalypse, the show tells the story of Aziraphale and Crowley, an angel and demon all too comfortable with their Earthly existences, who are suitably mortified when Satan decides to deliver the antichrist and bring about the End of Days. As it happens, the Satanic Nuns of the Chattering Order of St. Beryl get their baby baskets in a muddle, which means Satan's devilish delivery doesn't quite go as planned.

Much of the show's watchability is down to the inspired casting of Michael Sheen and David Tennant, as Aziraphale and Crowley respectively. Tennant originally went for the angelic role, but it's hard to imagine him as anything other than a rock 'n' roll snake who drives a classic Bentley with Queen on full volume.

The rest of the cast, which includes Jon Hamm, Jack Whitehall, Miranda Richardson and Josie Lawrence, is similarly formidable, and the pacing never less than sprightly. Gaiman flits us hither and thither in time, from the Garden of Eden to ancient Rome and Shakespeare's Globe Theatre, ensuring a wickedly entertaining ride.

Picture: With cinematographer Gavin Finney's widescreen framing and inventive, apocalyptic visual effects, *Good Omens* looks consistently cinematic. Available in 4K HDR on



Good Omens will also be shown on BBC2 later in the year



select devices, the colour grading is deep and rich. A variety of different cameras were used during the shoot, including a lightweight Arri Alexa SXT and Mini, and an Arriflex D-21 modified for hand-crank capture, and the end result is lush and polished. **Audio:** Sonically the show is more home cinema heaven than hell. The score by David Arnold is effervescent and jaunty, at times choral, sometimes rocky, often baroque.

One running joke is the recurring copy of Queen's *Greatest Hits* CD, as favoured by Crowley. Arnold riffs on that for the main theme, which he describes as homage to Brian May, and there's certainly a touch of *Night at the Opera* evident. It's worth sticking with the end credits too, as every episode has a rewritten version of the main theme. **SM**

HCC VERDICT

Good Omens

→ Amazon Prime Video

WE SAY: This funny and faithful adaptation is everything fans were hoping for. Simply divine.

Movie: ★★★★★

Picture: ★★★★★

Audio: ★★★★★

OVERALL: ★★★★★

→ DEADWOOD: LONG DEAD

→ Sky Atlantic

The boys (and girls) are back in town as HBO resurrects its popular *Deadwood* TV series for a long-awaited feature-length closer. For fans left wondering what became of Al Swearengen (Ian McShane), Seth Bullock (Timothy Olyphant) Trixie (Paula Malcomson), et al, after the end of Season Three in 2006, this is essential viewing.

In addition to gathering together (most) of the TV series cast, HBO sensibly enlists original showrunner David Milch (who also created *Hill Street Blues* and *NYPD Blue*) to script this finale. And the good news is that Milch has lost none of his ear for (profane) dialogue, nor his ability to weave a multitude of characters into a tight, satisfactory narrative.

Almost mirroring the gap between the series and this film, the action here jumps a decade forward. Season Two/Three villain George Hearst (Gerald McRaney) – now a US Senator – has returned to the

eponymous mid-West town, seeking to close a land deal. But he soon realises that someone he thought was dead is still alive...

The result is very much a near two-hour dip into the familiar *Deadwood* world, albeit showcasing a zipplier pace than the slow-burning show. Some will wish the initial plan for a pair of films had come to fruition, as this one-shot format necessarily limits the screentime of certain characters. Yet Milch deserves credit for effectively making it feel the show never went away; there's the expected detailed set design and evocative cinematography (although, as with HBO's *Game of Thrones*, there's no Ultra HD download option), and McShane is the forceful presence he always was. Most importantly, the urge to neatly tie up all loose knots is resisted, while still bringing the story to a fitting – and melancholy – conclusion. **MC**

★★★★★

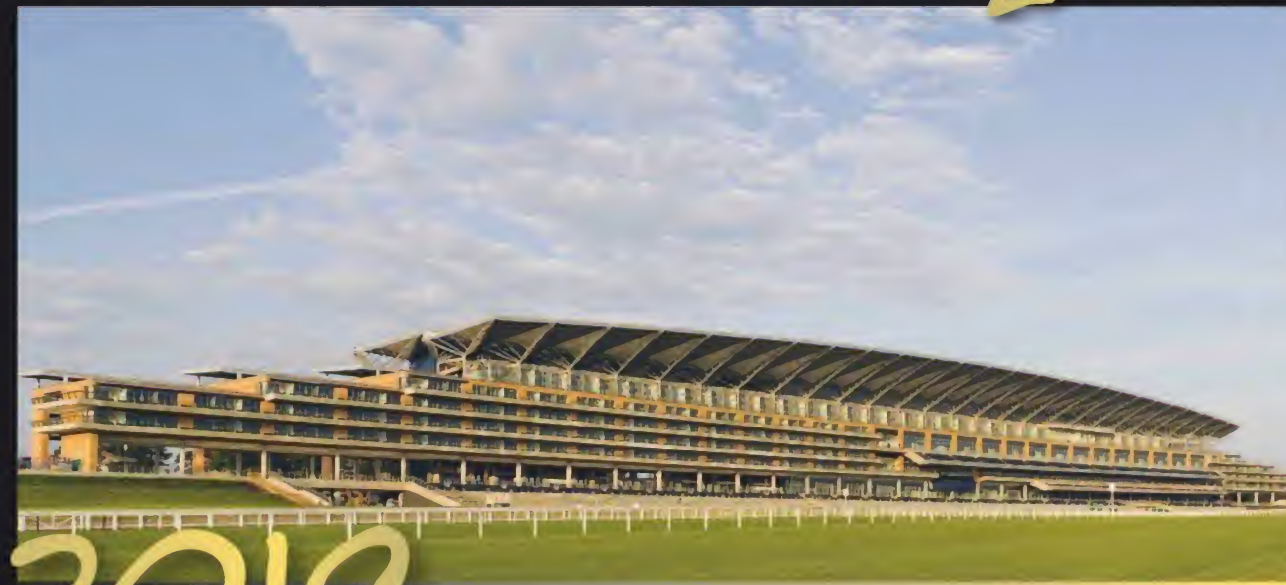


The *Deadwood* movie was first mooted 13 years ago, but only greenlit in 2016

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PLAYBACK 97

This time it's so much more...

After four decades is there anything left to be said about *Alien*? You may be surprised



Author J.W. Rinzler has also written books about the making of *Star Wars*, *Planet of the Apes* and the *Indiana Jones* films

→ THE MAKING OF ALIEN

J.W. Rinzler → Titan Books → £45

Beginning with the *Book of Alien* in 1979, the four decades that have passed since Ridley Scott's sci-fi-horror masterpiece first shocked cinema audiences have seen the publication of countless books about the making of the movie (either by itself or in conjunction with its sequels). So when Titan Books announced it would be celebrating *Alien*'s 40th anniversary with a new tome about the film's production, we were wondering what could possibly be left to say.

We should have had a little more faith. Across the 336 pages of this coffee-table book, author J.W. Rinzler recounts the entire story of the film's production in excruciating detail, from writer Dan O'Bannon's original germ of an idea and the various revisions the script went through as it was being developed for the screen, right up to the film's reception and legacy.

Drawing on a staggering array of press clippings, archive interviews, diaries and new conversations with Ridley Scott and some of his key collaborators, Rinzler paints an incredibly vivid picture of the film's tumultuous and often fractious creation. The sheer amount of detail and information the author has unearthed is staggering; more than enough to justify this hefty hardback's existence on top of all of those earlier publications, as well as the copious DVD/



The book is illustrated with a stunning collection of production photos and art

Blu-ray extra features that fans have already enjoyed.

Of course, this being a Titan Books release, *The Making of Alien*

is as stunning to look at as it is fascinating to read. Rinzler's raiding of the Fox vaults has also turned up hundreds of photographs and illustrations, some never-before-seen. These range from concept art and set blueprints to behind-the-scenes photos and unusual international poster art.

All told, *The Making of Alien* is one of the most comprehensive books of its type we have ever encountered. More than just appealing to fans of Scott's film, this will be savoured by anybody interested in the filmmaking process.

www.titanbooks.com



→ THE SELF PRESERVATION SOCIETY: 50 YEARS OF THE ITALIAN JOB

Matthew Field → Porter Press International → £45

When it comes to recounting the definitive history of that endlessly quotable doyen of Swinging Sixties 'cool Britannia', 1969's *The Italian Job*, it is difficult to think of anybody better suited to the task than Matthew Field. A lifelong fan of the film, not only is Field the author of 2001's *The Making of The Italian Job* (published when he was just 20 years of age), but he also produced and directed the *Self Preservation Society: Making The Italian Job* documentary and *Mini Adventures* featurette that have graced some of the film's DVD and Blu-ray releases.

As you'd expect, this means Field has a deep knowledge of the film and its production, and he has also enjoyed unrivalled access to its cast and crew over the past 20 years. Here he returns to the myriad interviews he's conducted, allowing those involved in making *The Italian Job* tell its story almost entirely in their own words.

Starting with a look at scriptwriting and casting the film, the real meat of this 336-page hardback comes from the sizable section devoted to the shoot itself. Running through the film almost scene-by-scene, it's packed with stories about the challenges the production team were forced to overcome in getting the movie made. Closing things out are a look at *The Italian Job*'s original release and its subsequent reappraisal. Field even makes space to talk to some of those involved in the 2003 Mark Wahlberg remake.

Add to that hundreds of stills and rare behind-the-scenes photos, plus individual profiles of some of the key players in the film and the cars that appear, and you have a book that no fan of *The Italian Job* should be without.

www.porterpress.co.uk



Collecting...

Clint Eastwood

The actor/director returns to Blu-ray this month in *The Mule* – **Team HCC** trawls through his near 70-year career to highlight ten of his best moments on both sides of the camera

THE BEGUILLED

1971 was something of a banner year for Eastwood. Not only did he make the jump to directing movies with *Play Misty for Me* (below), he also starred in two of his finest collaborations with friend and mentor Don Siegel – one being this sizzling slice of Southern Gothic. Set during the American Civil War, *The Beguiled* casts Eastwood in the role of a wounded Northern soldier taken in by a Southern girl's school. Quickly becoming an object of infatuation for the young women (and their headmistress), he's happy to manipulate the situation – only to discover that he isn't in control after all...

Get it: Available on a barebones BD, or as part of Universal's *Clint Eastwood: Eight Movie Collection* boxset (which also includes *Play Misty for Me* and *High Plains Drifter*, and now sells for around £20).



CHANGELING

Angelina Jolie headlines this based-on-a-true-story 2008 crime drama, helmed by Eastwood, about a mother's search for her nine-year-old son, and the possibility that he's been replaced by an impostor. A period piece set in 1920s Los Angeles, Eastwood delivers sepia-tinged visuals and isn't afraid to dig into the macabre elements of the story. He also writes the melancholy score.

Get it: Universal's 2009 Blu-ray looks and sounds fine, but bonus material is a bit perfunctory.



UNFORGIVEN

Eastwood made an (as yet) final return to Westerns in 1992, starring in and directing this seemingly straightforward tale of an elderly outlaw taking on 'one last job.' Yet the script doesn't play as you might expect, and by the film's end *Unforgiven* has both exposed the myths of the Old West and reaffirmed the primacy of the genre.

Get it: A 2017 Ultra HD Blu-ray reissue (based on a new 4K scan by Warner Bros.) delivers superb image quality, and includes previous bonus features.



PLAY MISTY FOR ME

Eastwood's directorial debut, this 1971 psychological thriller is something of a forerunner to the likes of *Fatal Attraction* with its story about a self-centred late-night radio DJ (Eastwood) whose brief fling with a fan (Jessica Walter) takes her obsession to dangerous new heights.

Get it: Universal actually managed to locate some bonus bits for *Play Misty for Me* (including a 45-minute retrospective documentary), but only put them on the region-free US Blu-ray.



MYSTIC RIVER

For this brilliant, thought-provoking 2003 crime/mystery, Eastwood assembles an A-grade cast (Sean Penn, Tim Robbins and Kevin Bacon take the trio of lead roles) and paces the drama – which builds to a tragic finale – to perfection.

Get it: A Deluxe DVD release in 2004 included a CD of the Eastwood-composed soundtrack; Warner's sole 2010 Blu-ray outing for *Mystic River* eschews such a bonus but does retain the Bacon/Robbins commentary track and in-depth interviews.

TOP PICK



THE GOOD, THE BAD AND THE UGLY

Sergio Leone, Eastwood and composer Ennio Morricone finished off *The Man With No Name* trilogy in style in 1966 with this epic (nearly three-hour) Spaghetti Western focused on a hunt for buried treasure.

Get it: A film with a varied history on DVD and Blu-ray, via missing scenes, a longer cut, and tweaked soundmixes. A 2017 Kino Lorber Blu-ray (Region A) offers 'Theatrical' and 'Extended Cuts'. Fox's 2014 UK Blu-ray of the Extended Cut is based on a 4K remaster; a previous 2010 release wasn't.



IN THE LINE OF FIRE

Secret Service Agent Frank Horrigan (Eastwood) was part of the detail that failed to stop the assassination of JFK. Thirty years on, thanks to John Malkovich's antagonist, he has a chance to make amends (and Eastwood make a slick transition to the elder statesman of action thrillers) in this uncomplicated but highly enjoyable 1993 flick from director Wolfgang Petersen.

Get it: Petersen provides a commentary track for Sony Pictures' 2008 Blu-ray, now available for under a tenner.



HIGH PLAINS DRIFTER

Eastwood stars in and directs this 1973 Western with a twist from *French Connection* screenwriter Ernest Tidyman. Enigmatic and slightly surreal, and at times uncomfortably violent, it brings a whole new meaning to 'painting the town red...'

Get it: Given a 40th Anniversary Blu-ray release in 2013 by Universal, with a transfer based on a new restoration of the original 35mm elements. Remarkably, however, the studio rustles up nothing more than the two-minute theatrical trailer in the way of extras.



DIRTY HARRY

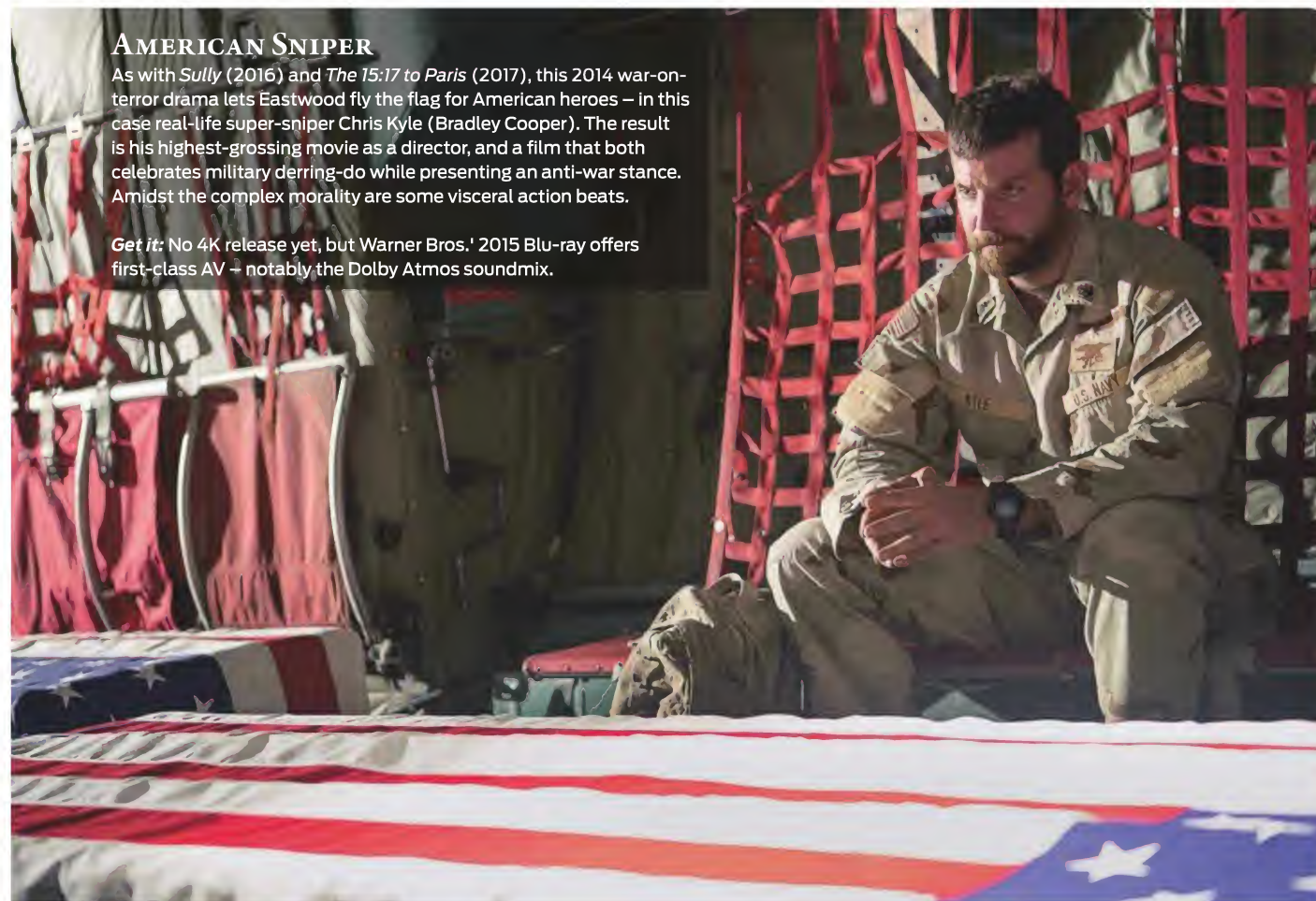
The other flick from Eastwood's *annus mirabilis*, this 1971 teamup with director Don Siegel has the pair swapping the American West for the West Coast, although the role of cop 'Dirty' Harry Callahan doesn't find Eastwood veering far from his lone gunslinger persona. Riffing on the real-life hunt for the Zodiac Killer, the movie is a *bona fide* classic – grim, gritty but with moments of dark humour, and brilliantly scored by Lalo Schifrin.

Get it: Bag it on standalone Blu-ray or as part of the *Dirty Harry Collection* BD boxset with its four sequels (of which 1973's *Magnum Force* is the best).

AMERICAN SNIPER

As with *Sully* (2016) and *The 15:17 to Paris* (2017), this 2014 war-on-terror drama lets Eastwood fly the flag for American heroes – in this case real-life super-sniper Chris Kyle (Bradley Cooper). The result is his highest-grossing movie as a director, and a film that both celebrates military derring-do while presenting an anti-war stance. Amidst the complex morality are some visceral action beats.

Get it: No 4K release yet, but Warner Bros.' 2015 Blu-ray offers first-class AV – notably the Dolby Atmos soundmix.



Have we missed one of your favourite Clint Eastwood films?
Let us know: email letters@homecinemachoice.com

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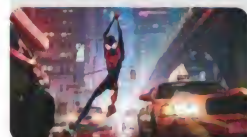
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TOP 15 Televisions

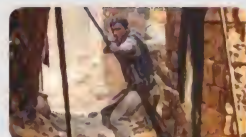
01

LG 65OLED9C → £3,300 ★★★★★
 LG continues to evolve its OLED proposition, fine-tuning AV performance and smart skills to deliver an excellent all-rounder. HDMI 2.1 brings some feature tricks, too. Also see the step-up E9 model. HCC #299/#300

TOP 5 Blu-ray movies



Spider-Man: Into the Spider-Verse [UHD Blu-ray]
 This Spider-Man 'toon feels fresh thanks to its comic book aesthetic, and on 4K BD it's given a colour/contrast-rich HDR presentation and excellent Dolby Atmos soundmix. HCC #298
 ★★★★★



Robin Hood [UHD Blu-ray]
 The movie is a disappointment, but Lionsgate shows the way forward by providing both HDR10+ and Dolby Vision encodes. Image quality – derived from 8K cinematography – is stunning. HCC #298
 ★★★★★



Bumblebee [UHD Blu-ray]
 Enjoyable Transformers spin-off revels in '80s nostalgia and a heart-warming narrative. Paramount's 4K BD packs a seismic Dolby Atmos mix, colourful visuals and a fine selection of extras. HCC #299
 ★★★★★



Aquaman [UHD Blu-ray]
 Perhaps the best example yet of the potential of wide colour and HDR technologies, Warner's UHD platter dazzles from start to end. Bassy Atmos audio and plenty of bonus features complete an impressive package. HCC #298
 ★★★★★



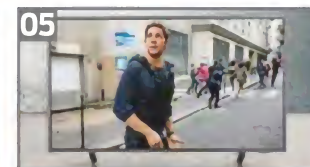
The Favourite
 Wonderfully witty historical black comedy with an Oscar-winning turn from Olivia Colman as Queen Anne. Solid 1080p encode and ambient DTS-HD 5.1 audio, but a meagre selection of bonus bits. HCC #299
 ★★★★★



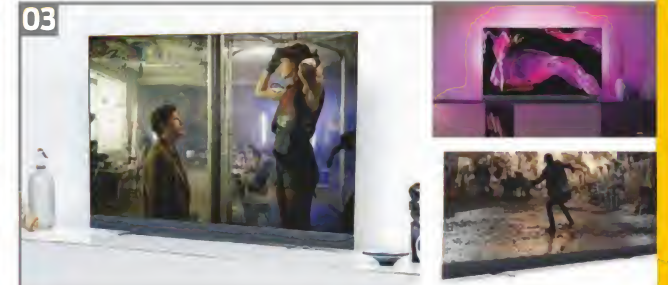
02 Samsung QE65Q90R → £3,800 ★★★★★
 The Korean giant's premium 4K HDR TV continues to showcase the colour and brightness talents of QLED tech, and improves black level delivery and upscaling via panel/processing upgrades. HCC #298



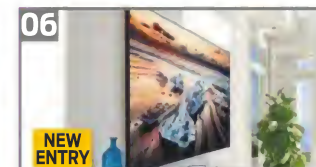
04 Panasonic TX-65FZ852
 → £3,000 ★★★★★
 4K HDR OLED (with HDR10+ support) that offers subtlety and refinement in shades (particularly with colour presentation and near-black handling), making up for a slight lack of dynamic punch. HCC #290



05 Philips 43PUS6753
 → £430 ★★★★★
 Sharp, colour-rich, direct-LED images, plus Ambilight and Philips' bespoke SAPHI smart system, make this 43in 4K HDR LCD a smallscreen(ish) dream. Superb option for a second-room/budget setup. HCC #291



03 Philips 65OLED903 → £3,500 ★★★★★
 Take impressive audio from a B&W-designed speaker array, OLED-delivered 4K HDR visuals that outshine the competition, and add a sprinkle of Ambilight, and you get the most exciting display Philips has ever released. HCC #290



06 Samsung QE82Q950R
 → £10,000 ★★★★★
 Second-generation 8K QLED that introduces an HDMI 2.1 input, and viewing angle and backlight management tweaks. Upscaled 4K imagery is mindblowing at times, and the 82in size sells the resolution well. HCC #300



07 Sony KD-55AF9
 → £3,000 ★★★★★
 Pricier than most 55in OLED rivals, but this Master Series Sony has a unique style, effective 'invisible' audio solution, Dolby Vision/Atmos support and lush 4K visuals. Good new Android OS, too. HCC #292



08 Sony KD-55XF9005
 → £1,700 ★★★★★
 Impressive backlighting, dynamic HDR images and top-quality motion processing are the major draws of this mid-tier Bravia. Android OS still needs improvement, though. HCC #285



09 Samsung QE65Q85R
 → £3,000 ★★★★★
 Reducing the number of local dimming zones versus the Q90R weakens backlighting precision, but otherwise this step-down model is highly desirable. Bright, sharp and well contrasted. Smarter design, too. HCC #299



10 Hisense H75U9A
 → £3,500 ★★★★★
 This 75in LED is the brightest display we've seen, yielding benefits with HDR content, while backlit illumination aids solid black levels. Sharpness and colour delivery are less impressive, but the price/size ratio is good. HCC #289



11 Hisense 55A6200
 → £430 ★★★★★
 A great value option, despite brightness levels not doing justice to its HDR support. Visuals are sharp with solid black levels and finessed colour handling. 4K apps and decent audio round out the package. HCC #295



12 Hisense 55U7A
 → £800 ★★★★★
 FIFA-branded 4K HDR flatscreen that makes up for a lack of HDR brightness through its image clarity and solid black levels. Strong audio and a clutter-free smart platform sweeten the deal. HCC #287



13 TCL 55DC748
 → £700 ★★★★★
 While this budget UHD LCD can look bright, detailed and colour-rich, its whole-frame dimming engine and absence of motion compensation count against it. The JBL soundbar is a little underpowered. HCC #289



14 Sony KD-55XF8505
 → £1,100 ★★★★★
 This mid-tier edge-lit Sony set has its strengths, particularly its onboard audio and bright room/bright content playback. But a limited contrast means it never feels overly cinematic. HCC #287



15 Hitachi 75HL16T64U
 → £1,350 ★★★★★
 This 75in megascreen offers a lot of 4K image for not a lot of money. Predictably, picture quality can't match that of big-brand rivals – but the TV holds appeal if you're mainly after an SDR display. HCC #285

TOP 15 Speaker systems

**Bowers & Wilkins 700 Series 5.1**

→£3,800 ★★★★★

This array finds the larger models in the 700 Series proving their mettle with formidable power and precision, an expressive mid-band and detailed highs. Excellent. *HCC #285*

TOP 5 On-demand

**Bird Box [Netflix]**

Sandra Bullock closes her eyes and hopes for the best in this well-constructed high-concept thriller. *Bird Box* is fast-paced and atmospheric, and has a 5.1/ Atmos soundmix that skilfully heightens the tension. *HCC #295*

★★★★★

**Outlander: Season Four [Amazon Prime]**

The historical time-travel romp moves its action Stateside for another 13 episodes of steamy romance and deft dramatic plotting, all told with convincing period detail. *HCC #294*

★★★★★

**Titans [Netflix]**

The juvenile superheroes (including Dick Grayson/Robin) get a gritty makeover in this 11-episode DC Universe series that plays in 1080p. Superb 5.1 soundmixes will have you cranking your AVR. *HCC #296*

★★★★★

**The Umbrella Academy [Netflix]**

A delicious mix of weirdness and invention, this comic book adaptation is a change of pace from the usual Marvel/DC shenanigans. Excellent 4K HDR presentation. *HCC #297*

★★★★★

**Triple Frontier [Netflix]**

Oscar Isaac and Ben Affleck headline this tense and intentionally grim big-budget action thriller from the writer of *Zero Dark Thirty* and *The Hurt Locker*. Streams in 4K HDR/ Atmos. *HCC #298*

★★★★★

**M&K Sound IW150 5.1** →£8,550 ★★★★★

The in-wall IW150 speakers offer the transparency and detail of a professional studio monitor in an enclosure that can vanish. This array adds driver-matched on-wall tripole surrounds and M&K's fearless X12 sub. The result is outstanding. *HCC #289*

**B&W 600 Series 5.1**

→£1,850 ★★★★★

Continuum drivers replace Kevlar in B&W's entry-level speaker range, delivering a sound that's precise, transparent and highly entertaining. *HCC #295*

**KEF Q Series 5.1.2**

→£3,300 ★★★★★

KEF's revamped Q Series now offers Atmos modules for an up-to-the-minute sonic experience. Big, bold-looking speakers. Robust, immersive audio. *HCC #280*

**Wharfedale DX-2** →£450 ★★★★★

The asking price of this 5.1 system will tell you it doesn't offer the last word in surround sound fidelity, but Wharfedale's package is compact, well made and faultlessly delivers on its home-cinema-on-a-budget promise. *HCC #283*

**Elipson Prestige Facet 7.2.4**

→£3,500 ★★★★★

13 cabinets come together to create a great-value and immersive Dolby Atmos array. Rich in fidelity and neutrality; modern styling is another plus point. *HCC #291*

**Klipsch Reference Premiere 5.1** →£3,000 ★★★★★

Bipole surrounds, a wide, low-slung centre, full-range floorstanders and a well-integrated sub combine in this dynamic, easy-to-drive array. *HCC #300*

**Q Acoustics 3050i**

→£1,350 ★★★★★

This update on the previous 3000 series makes subtle performance and styling improvements. The result is an excellent, well-priced, stylish package. *HCC #287*

**Focal Aria 926 5.1**

→£4,500 ★★★★★

Multichannel system mixing floorstanders with bipole surrounds. Superb bass handling and a large, spacious, detail-packed soundfield. *HCC #299*

**GoldenEar Triton Two+ 5.2**

→£6,000 ★★★★★

Floorstanders with in-built active subwoofers provide tight, dynamic bass and simplify installation, while ribbon tweeters ensure a sweet top-end. *HCC #297*

**Monitor Audio MASS 5.1**

→£600 ★★★★★

Second-gen redesign of MA's sub/sat system refines the styling and colour options, while retaining the compact dimensions and all-round sound quality. *HCC #298*

**Jamo S Series 5.1.2**

→£1,120 ★★★★★

An affordable package with drop-dead gorgeous styling, neat Atmos module integration and involving sonics – but the 8in sub isn't a beast. *HCC #290*

**Focal Sib Evo Dolby Atmos 5.1.2**

→£1,200 ★★★★★

Enjoyable-sounding and well-priced sub/sat system with Atmos upfitters in front L/R enclosures. Not the smallest 'satellite' speakers around. *HCC #276*

TOP 10 Projectors


Sony VPL-VW570ES → £8,000 ★★★★★

This native 4K projector offers a top-flight UHD performance, and adds a dynamic iris and boosted luminance over the step-down 270ES. Still not the brightest model around, but in a dedicated cinema it shines. *HCC #295*


Optoma UHD51 → £1,500 ★★★★★

Optoma's mid-priced 4K DLP model adds 3D playback (at 1080p) to its home cinema repertoire, making it an obvious upgrade for stereoscopy fans. Sharp, colour-rich and dynamic visuals. *HCC #287*


JVC DLA-N7B

→ £8,500 ★★★★★

JVC revamps its home cinema projector line with native 4K optics, new HDR tone mapping skills and revised styling. Quiet in operation and an excellent 4K/HDR/3D performer. *HCC #298*


SIM2 Nero 4S

→ £30,000 ★★★★★

High-price PJ for high-end largescreen installs. Class-leading brightness and sharpness results in exemplary 4K HDR projection. Precise setup controls and wide-ranging calibration tools. *HCC #296*


BenQ W2700

→ £1,500 ★★★★★

Keenly priced single-chip 4K DLP projector with wide colour mode and impressive HDR delivery, ensuring clarity and living room-friendly styling. A bit of a noisy runner though. *HCC #299*


Sony VPL-VW270ES

→ £5,000 ★★★★★

Sony has refined the performance of its entry-level 4K PJ, improving contrast and HDR delivery, ensuring cinematic thrills. Bonus features include motorised controls and 3D playback. *HCC #293*


BenQ W5700

→ £2,600 ★★★★★

A performance step-up from the more affordable W2700, with a wider throw ratio and improved colour handling (to 100 per cent DCI-P3). Impressive motion handling, but again a bit noisy. *HCC #300*


Epson EH-TW7400

→ £2,200 ★★★★★

HG playback is missing from the spec sheet but otherwise this 4K upscaling LCD PJ hits all the right notes. Setup tools include lens memory presets; images are bright, colourful and contrast-rich. *HCC #293*


Sony VPL-VW870ES

→ £25,000 ★★★★★

Native 4K beamer with laser light source aimed at largescreen theatres. Superb images from both SDR and HDR sources (plus 3D support), but there are strong rivals both above and below the price. *HCC #297*


ViewSonic X10-4K

→ £1,200 ★★★★★

Doesn't have the form factor or setup flexibility for a permanent cinema install, but otherwise this short-throw 4K HDR PJ is smart, visually strong and has a surprisingly excellent onboard speaker. *HCC #300*

TOP 10 Blu-ray players


Pioneer UDP-LX800 → £2,200 ★★★★★

A phenomenal universal disc spinner, which adds audiophile-grade music playback to its 4K BD talents. Includes Dolby Vision support, with HDR10+ promised via future firmware. Build quality is staggering. *HCC #293*

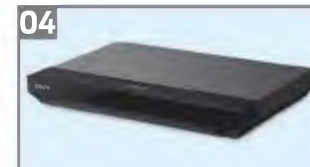

Panasonic DP-UB9000 → £850 ★★★★★

Supporting both HDR10+ and Dolby Vision, and incorporating useful image adjustments, this premium player is at the leading edge of UHD BD playback. The astonishing construction and provision of VOD apps heighten its appeal. *HCC #292*


Pioneer UDP-LX500

→ £1,000 ★★★★★

Lacks the audiophile features (including XLR output) of the UDP-LX800 but still sounds sublime with CD and hi-res audio. Dolby Vision playback, with HDR10+ due via firmware. No VOD apps. *HCC #296*


Sony UBP-X700

→ £250 ★★★★★

A compact player updated to Dolby Vision support, the UBP-X700 has a nondescript design, no analogue outs and a stubby remote. But it plays great, and offers SACD support. *HCC #284*


Panasonic DP-UB420

→ £250 ★★★★★

Hi-res file support and HDR10+ compatibility make up for this deck's lightweight build and basic streaming app provision. Plenty of user tweaks on offer and a tempting price. *HCC #291*


Panasonic DP-UB820

→ £400 ★★★★★

Panasonic's mid-ranger delivers on both the HDR10+ and DV fronts, and introduces multichannel analogue outputs. As with the UB420, the VOD portal could do with a style makeover. *HCC #295*


Sony UBP-X800

→ £270 ★★★★★

Sony embraces UHD Blu-ray with a full-width, sturdy design that'll also spin DVD-A and SACD platters. A great all-rounder, but no current Dolby Vision support or word on an update. *HCC #274*


Cambridge Audio CXUHD

→ £800 ★★★★★

The lack of analogue outputs is a surprise considering CA's heritage, but this universal (and DV-capable) deck sounds sweet over its digital outs. As with Oppo's UDP-203, a MediaTek SoC is used. *HCC #279*


Panasonic DMP-UB300

→ £130 ★★★★★

Great 4K imagery from this bargain 2017-era deck, but you might prefer to up your budget – no split HDMI, optical/coaxial or Wi-Fi connections here. Half-size design for an easy install. *HCC #272*


Xbox One X

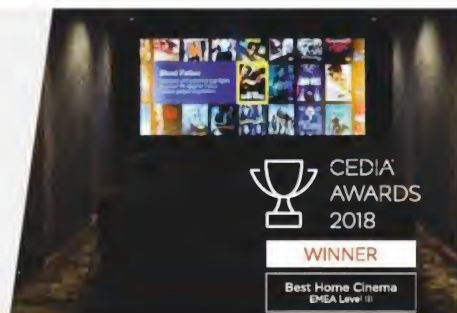
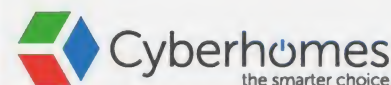
→ £400 ★★★★★

Microsoft's superior console dazzles with its native 4K HDR gaming chops – and doubles as a UHD disc player. If you're short of shelf space and like mixing movies with joypad fun, it's a decent option. *HCC #280*

Award-winning home cinemas

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Photo courtesy of Gary J. Fernandez Limited

TOP 10 AV Receivers/AV Processors

- 

01
Denon AVR-X4500H → £1,500 ★★★★★
Denon's top-tier nine-channel AVR is due an IMAX Enhanced update shortly, topping off an already extensive, user-friendly feature set. Movie playback is dynamic and detailed, and two-channel music sounds sweet too. Superb. HCC #293
- 

02
Arcam AVR850 → £4,500 ★★★★★
High-end seven-channel AVR marrying Class G amplification and Atmos support with talented Dirac Live Room EQ for an excellent performance. Lacks a few feature frills, but 11-channel pre-outs allow full-fat setups. HCC #257
- 

03
Denon AVC-X8500H → £3,300 ★★★★★
For those who want to go even bigger with their Atmos/DTS:X system, this flagship provides 13 channels of power. Setup can be complex, and there's no FM tuner, but otherwise this is first-class. HCC #285
- 

04
Yamaha CX-A5200 → £2,600 ★★★★★
11-channel processor with MusicCast integration, XLR hookup and a trio of HDMI outs. Atmos and DTS:X support is bolstered by impressive Surround:AI DSP. Flexible and enjoyable. HCC #292
- 

05
Marantz AV8805 → £3,600 ★★★★★
The most affordable 13-channel processor around, the AV8805 combines lean looks, setup flexibility and a musical, detailed sound performance. Uses Audyssey MultEQ XT32 calibration. HCC #288
- 

06
Marantz NR1609 → £650 ★★★★★
AirPlay 2 and a phono stage input for vinyl junkies are among the new specs of Marantz's 7-channel slimline model. An assured performer with film and music; great usability and styling. HCC #295
- 

07
NAD Masters Series M17 V2 → £5,500 ★★★★★
Dirac Live replaces Audyssey EQ in this revamped high-end processor; 4K HDR passthrough, Atmos and DTS:X decoding, and BluOS music streaming also join the party. HCC #293
- 

08
Pioneer VSX-933 → £470 ★★★★★
An affordable seven-channel AVR where copious music streaming options are joined by a punchy, upbeat home cinema performance. Improved remote and menus, but only one HDMI output. HCC #292
- 

09
IOTAVX AVXP1 → £1,050 ★★★★★
Brit brand power amplifier with plenty of Class AB grunt (rated at 7 x 110W into 8 ohms) and a rugged build quality – one to audition if your cinema setup is in need of more channels. HCC #293
- 

10
Yamaha RX-A3080 → £2,000 ★★★★★
Yamaha's flagship receiver is still 'only' a nine-channel model while rivals add more power. But this is feature-packed and a dynamic, dramatic performer. DSP modes add appeal. HCC #298

TOP 5 Bonus features

- 

Dragonwyck (alternate presentation)
Use your player's 'Angle' button to switch between two different encodes of this 1946 Vincent Price romp – an older, more filmic HD master, and a cleaner-looking 4K restoration. HCC #298 ★★★★★
- 

Bringing Bumblebee to the Big Screen
A solid 50-minute effort covering the *Transformers* film's genesis, casting, 1980s production design and more. Split into five parts with no 'Play All' option, which is annoying. HCC #299 ★★★★★
- 

Howard: A New Cult Hero
Found on 101 Films' recent *Howard the Duck* BD, BFI Flipside co-creator Vic Pratt explores the comic book origins of the quackers character and his troubled journey to the bigscreen. HCC #299 ★★★★★
- 

Widows Unmasked: A Chicago Story
How does a 1980s ITV drama become a 2019 Hollywood film directed by Oscar-winner Steve McQueen? This detailed 50-minute *Making of...* doc has the answers. HCC #297 ★★★★★
- 

Learned Behavior: Special Features at Work
Fascinating 60-min roundtable chat that crops up on the *Kin* Blu-ray, covering the concept of extra features themselves. *Kin*'s co-directors are joined by Kevin Smith and others. HCC #296 ★★★★★

TOP 10 Subwoofers

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01
REL No.25 → £6,500 ★★★★★
REL celebrates its 25th anniversary in style with this 15in/1,000W premium concoction that exhibits exhilarating speed and nuance down to serious depths. Big, but beautiful. HCC #271
- 

02
Bowers & Wilkins DB1D → £3,750 ★★★★★
This sequel to the DB1 moves EQ to an app and changes driver/amp design. Beautifully controlled performance with depth and detail. Gorgeous bodywork. HCC #277
- 

03
SVS SB16-Ultra → £2,500 ★★★★★
A 16in driver and 1,500W amp combine to give SVS's flagship sealed sub real appeal. Goes low but remains tight and fast. App-assisted EQ and operation. HCC #270
- 

04
Fyne Audio F3-12 → £600 ★★★★★
12in driver in a ported enclosure at a great price. Basic setup and styling, but it maintains control and nuance while dropping deep. HCC #297
- 

05
SVS SB-3000 → £1,275 ★★★★★
A new 13in driver and 800W amp combi is added to SVS's app-based EQ/control. The result is an excellent value sealed sub that hits deep and hard. HCC #298
- 

06
Bowers & Wilkins DB3D → £1,950 ★★★★★
Twin 8in drivers (rather than the 12in units on the DB1D) result in a compact bass-maker that still dazzles with its control and performance purity. HCC #299
- 

07
REL HT/1508 Predator → £1,600 ★★★★★
The flagship of REL's Serie HT lineup uses a 15in woofer and claimed 800W power plant to hammer home its home-cinema-centric ethos. Enormous fun. HCC #296
- 

08
REL HT/1205 → £700 ★★★★★
A larger (12in) driver and punchier amp than on the HT/1003 increases LFE enjoyment – but still at a bargain price. Lacks a bit of subtlety though. HCC #290
- 

09
Eclipse TD725SWMK2 → £5,000 ★★★★★
Eclipse aims for speed and accuracy with this flagship. Dual opposed 10in woofers perform as advertised – bass is astonishingly precise and percussive. HCC #297
- 

10
GoldenEar SuperSub X → £1,450 ★★★★★
Four drivers squeezed into a relatively compact design and given plenty of push from a 1,400W amp. Standout traits are impact and depth. HCC #272

TOP 5 Console games

- 

Red Dead Redemption II
Rockstar Games' years-in-the-making Wild West action/puzzler prequel offers a mammoth open-world gaming experience with excellent attention to detail. Fantastic five-star fun, despite muted visuals. HCC #293 ★★★★★
- 

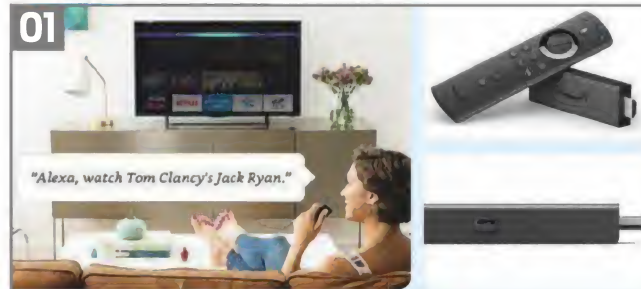
Resident Evil 2
Capcom remakes the legendary horror survival game for current-gen PS and Xbox consoles, retaining the original's charms but tweaking gameplay and delivering a first-rate AV experience. HCC #296 ★★★★★
- 

Tom Clancy's The Division 2
Duck-and-cover shooter with both solo and multiplayer online modes that's an AV treat (particularly in 4K on Xbox One). Lengthy missions limit casual appeal, though. HCC #298 ★★★★★
- 

Super Smash Bros. Ultimate
Boasting a host of characters (including some retro surprises), eight-player multiplayer, smooth 60fps visuals and frantic action, this Nintendo Switch beat-'em up is a hoot. HCC #295 ★★★★★
- 

Days Gone
Slotting easily into the upper echelons of PS4 exclusives, Sony's zombie-infused open-world survival/RPG/shoot-em-up benefits from its sheer scale and playability. HCC #299 ★★★★★

TOP 10 Accessories

**01 Amazon Fire TV Stick 4K** → £50 ★★★★★

This upgraded streaming dongle brings 4K HDR (HDR10+; Dolby Vision) and Dolby Atmos to your movie den. Voice control improves search, while a new quad-core processor yields quick load times and stream optimisation. A little stunner. HCC #295

**02 Bluesound Node 2i** → £500 ★★★★★

Hi-res preamp/DAC to hook up to a stereo amp/AVR/active speakers. Integrates with the BluOS app for a wide range of streaming services and home media playback. Compact and an excellent performer. HCC #296

**03 Devolo Magic 2 (Home Kit)** → £270 ★★★★★

This next-gen networking system (featuring a trio of plug adapters) combines mesh Wi-Fi with the latest (and fastest) Powerline tech. Impressive in use, and a potential boon to streamers. HCC #298

**04 Amazon Echo Input** → £35 ★★★★★

No speaker here – just a disc-shaped Alexa device that links to your receiver via 3.5mm – or Bluetooth – and packs four far-field microphones to detect your voice commands. HCC #296

**05 Yamaha WX-AD10** → £150 ★★★★★

Simple to use, unobtrusive add-on that brings MusicCast to legacy AV gear via 3.5mm/phono connections. Not a bad price – only available in grey, unfortunately. HCC #274

**06 Roku Streaming Stick+** → £70 ★★★★★

If a simple life is your aim, this content-rich, 4K/HDR-capable stick from the streaming specialist is your friend. Idiot-proof interface and control. Good price. HCC #282

**07 Edifier S350DB** → £250 ★★★★★

Active 2.1 speaker system that's a fine alternative to a soundbar, with good bass integration and effects separation. No HDMI hookup and retro styling, but easy to setup and use. HCC #291

**08 Apple TV 4K** → £180 (32GB) ★★★★★

With Apple's iTunes movie store offering 4K HDR (Dolby Vision) movies at the same price as Full HD downloads, this compact media player (irritating handset aside) is sure to tempt. HCC #284

**09 Synology DS119j** → £95 ★★★★★

Entry-level single-bay NAS (you'll need to add your own HDD) that benefits from Synology's impressive DSM operating system. Quick to get up and running, versatile and smart-looking. HCC #292

**10 Amazon Echo Sub** → £120 ★★★★★

This nicely styled bass bin to supplement Amazon's Echo speakers adds notable punch to streamed music and makes a 2.1 Dot system good value. Lacks subtlety and is overbearing with speech radio, though. HCC #293

TOP 5 Blu-ray/DVD boxsets

**William Castle at Columbia: Volume One**

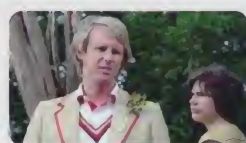
Four gimmick-filled spine-tinglers (including 1960's part-anaglyph 3D *13 Ghosts*) are joined by a typically brilliant selection of extras in Indicator's deluxe package. HCC #294

★★★★★

**The Ring Collection**

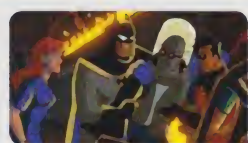
Ring, *Ring 2* and *Ring 0* – plus the oft-forgotten other sequel *Rasen* (aka *Spiral*) – get a Blu-ray boxset that will appeal to J-Horror fans. *Ring*'s new restoration is streets ahead of previous discs. HCC #297

★★★★★

**Dr Who: The Collection – Season 19**

The BBC's BD outing for Peter Davison's debut Time Lord season benefits from the show's move (in parts) from video to 16mm film capture. A TARDIS full of extras, too. HCC #295

★★★★★

**Batman: The Complete Animated Series**

All 109 episodes of Fox's groundbreaking 'toon have been meticulously restored for this BD boxset. Among the copious extras is a new 98-minute *Making of...* doc. HCC #293

★★★★★

**Once Upon a Time in China Trilogy**

Jet Li stars (as folk hero Wong Fei-Hung) in this trio of 1990s martial arts flicks, bundled here with fourth movie...*In America and China*. Extras include a trio of commentary tracks. HCC #295

★★★★★

TOP 10 Soundbars & Soundbases

**01 Samsung HW-N950** → £1,500 ★★★★★

The latest and greatest soundbar system to arrive from Samsung's US-based Audio Lab, the HDMI-equipped N950 crafts a dynamic, detailed and immersive 7.1.4 Atmos/DTS:X soundfield without cluttering your room. HCC #290

**02 Canton DM55** → £320 ★★★★★

Canton's smallest soundbase still delivers big sonic thrills. Twin woofers underpin clean and crisp mids and highs, and build quality is first-rate. Doodle to use. Bluetooth built-in. HCC #260

**03 Yamaha YSP-5600SW** → £1,900 ★★★★★

With its 46 drivers (including upfirs) this premium 'bar delivers precisely steered and immersive audio, even of the Atmos variety. Potent wireless sub and 4K-capable HDMI switching sweeten the high-end deal. HCC #254

**04 Denon HEOS Bar** → £570 ★★★★★

Multiroom-ready and app-controllable, this premium single-enclosure model offers powerful, detailed and warm sonics in spades. Can be expanded into a 5.1 system with extra HEOS hardware. HCC #287

**05 Samsung HW-Q70R** → £800 ★★★★★

An impressively potent subwoofer and nicely expansive 3.1.2 presentation make this sleek Samsung system one to audition. Includes a single HDMI input and ARC-enabled output. HCC #300

**06 Q Acoustics M3** → £300 ★★★★★

A 4in x 6in woofer is tucked away in the M3's eye-catching angular chassis, ensuring this well-priced soundbar has a full-range performance. Simple to use. Bluetooth streaming. HCC #271

**07 Harman Kardon Enchant 800** → £620 ★★★★★

The baby 'bar' in the Enchant range lacks secondary HDMI inputs but presents a well-organised soundstage with effects localisation and dynamic heft. Chromecast is integrated, and the design is gorgeous. HCC #298

**08 JBL Bar Studio** → £150 ★★★★★

No subwoofer here, just a fairly compact stereo 'bar' that offers a useful soundstage-widening 'Surround' mode, HDMI ARC connectivity, and a decent performance for the price. HCC #284

**09 Sony HT-ZF9** → £650 ★★★★★

This 3.1-channel soundbar handles Dolby Atmos streams and promises enveloping sonics via DSP trickery. The result isn't noticeable overhead audio, but a wide, high and exciting performance. HCC #289

**10 Q Acoustics M2** → £300 ★★★★★

Easily accommodated in/on AV furniture, and packing HDMI ARC for a simple hookup, this BMR-driver/built-in woofer soundbase impresses with its energetic delivery and price. HCC #279

TOP 5 Back-catalogue Blu-rays

**Black Hawk Down [UHD Blu-ray]**

A breathtaking modern war epic on a brilliant triple-disc release that ports over an extensive set of extras. A new Dolby Atmos soundmix makes the action even more visceral. HCC #300

★★★★★

**The Andromeda Strain**

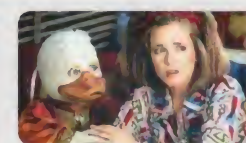
Based on a novel by Michael Crichton, this 1971 sci-fi thriller enjoys a second take on Blu-ray via an impressive 1080p image (derived from a new 4K scan of the 35mm negative) and fresh bonus material. HCC #300

★★★★★

**Alien: 40th Anniversary Edition [UHD Blu-ray]**

This 1979 sci-fi looks sublime in 4K HDR (including HDR10+), with notably improved shadow detailing and colour vibrancy. Only a few extras included, however. HCC #299

★★★★★

**Howard the Duck: Limited Edition**

An overdue BD release for the much-maligned George Lucas-produced 1986 comic book adaptation. Excellent extra features (including a booklet) and DTS-HD 5.1 audio. HCC #299

★★★★★

**Dazed and Confused**

Bin your old Universal Pictures release of Richard Linklater's '70s-set coming of age flick and get this much better-looking Criterion Collection outing instead, complete with *Making of...* doc and chat track. HCC #300

★★★★★

Missed an issue?

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Issue No.289



Issue No.290



Issue No.291



Issue No.292



Issue No.293



Issue No.294



Issue No.295



Issue No.296



Issue No.297



Issue No.298



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TOP 5 PVRs



NEW ENTRY

Manhattan T2 Freeview Play 4K, £80

Do you need an HDD PVR in the streaming era? This Freeview Play box loads up catchup via a responsive UI, offers welcome Watchlist functionality, and is ready for 4K HLG HDR

★★★★★



Sky Q, £subscription

Sky's new top-tier product offering dazzles with its image-rich user interface, wireless multiroom skills and recording flexibility delivered by the PVR's 12 tuners. Now supports 4K content

★★★★★



Humax FVP-5000T

Revamped menus, faster operation and tweaks to its triple-tuner engine make this the most advanced Freeview Play PVR around – and it doubles admirably as a DLNA player/media jukebox. 500GB/1TB/2TB

★★★★★



Humax DTR-T4000, £subscription

This YouView-based PVR is required to get BT Sport's new Ultra HD channel – available to those with BT fast fibre and a BT TV sub. Easy to use and with 1TB of storage

★★★★★



Manhattan T2-R, £120

The 500GB HDD and twin-tuner spec of this Freeview HD PVR is basic, but Manhattan's new hardware design, user interface (and the price tag) are appealing. Easy to use.

★★★★★

TOP 5 Headphones



JBL Tune600BTNC, £85

A commendable budget option from JBL, with closed-back, comfortable ear-cups, reasonably effective noise-cancelling, Bluetooth hookup, and a presentation with a good sense of scale and impact

★★★★★



Nuraphones, £350

Unusual over-ear/in-ear hybrid cans that measure the acoustic response of your inner ear to fine-tune performance. It's a highly impressive trick, but the design can make these a bit uncomfortable to wear

★★★★★



Audio Technica ATH-Mx50BT, £180

Cable-free Bluetooth update of a wired design, with 45mm drivers and lengthy battery life (claimed to hit 40 hours). Sturdy and comfortable, and a great sound for the money

★★★★★



Bowers & Wilkins PX, £330

B&W adds noise-cancelling to the general spec of its previous P7 wireless cans, a welcome update for those seeking uninterrupted listening. Offers a neutral, balanced sound suited to both movies and music

★★★★★



Sony WH-1000XM3, £330

Third-gen noise-cancelling wired/wireless 'phones are deliciously comfortable and deliver an intimate performance with strong spatial imaging and nuanced bass. Compatible with LDAC source gear

★★★★★

TOP 5 Wireless speakers



DALI Katch, £330

Portable Bluetooth speaker (aptX-capable) with stereo driver array and gorgeous design. Excellent blend of low-end punch and mid-range/treble detail. Rechargeable battery life is rated at 24 hours

★★★★★



Bluesound Pulse Mini 2i, £500

Hi-res-capable wireless speaker that proves equally impressive when used as a TV soundbar alternative. A largescale stereo sound with mid-range muscle and HF sparkle

★★★★★



Dynaudio Music 7, £875

Top-of-the-range multiroom option from Dynaudio, this sizable speaker creates a full-range, detailed soundstage. Music App offers useful adjustments and EQ modes. Inputs include HDMI (ARC)

★★★★★



Edifier S3000PRO, £580

Wireless (Bluetooth 5.0) active stereo pair employing ribbon tweeters and 6.5in midbass drivers for a performance that excels across the frequency range. Optical input allows TV hookup

★★★★★



Libratone Zipp 2, £280

Well-priced do-it-all portable speaker adds voice interaction, Wi-Fi streaming, Spotify Connect, 3.5mm hookup and auto Room EQ to its Bluetooth spec. Solid sound quality, albeit monophonic

★★★★★

HOME CINEMA Choice

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The man with a plan Celebrating James Cameron via *Avatar* and *Alita*...

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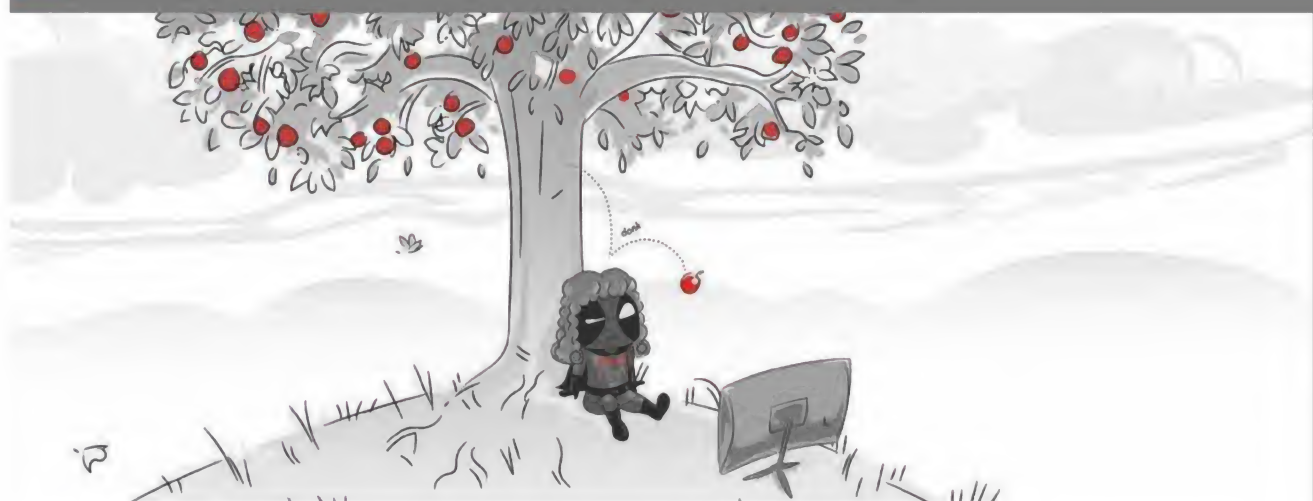
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AV Avenger

Sony, Samsung, Panasonic *et al* should keep an eye on Apple, says **Steve May**, because the technology giant's revolutionary XDR monitor technology looks tasty...

APPLE HAS GOT my attention, and I'm excited. Not because it's ditched iTunes, introduced a pretty decent UI on its new Apple TV app, or included support for Xbox One and PlayStation DualShock 4 game controllers in the new tvOS 13 – although all these wheezes are worthy of applause.

No, my pulse is racing because it's done something fundamentally different with LCD display technology. It might even be time to reboot those Apple TV rumours.

When Apple unveiled its largest ever Retina monitor, the 32in Pro Display XDR, at its annual Worldwide Developers Conference (WWDC) in San Jose in early June, the prospect of Tim Cook moving into the TV business suddenly became a whole lot more enticing.

Being AV enthusiasts you might understandably have missed the announcement. So here's the skinny, and why it was so interesting.

Apple's new XDR is intended as a partner for the new Mac Pro but its specification is ground-breaking in a wider sense. For starters, it's a 6K resolution 10-bit panel that covers the DCI-P3 colour gamut. It also uses clever polariser technology, for colour-accurate off-axis viewing, as well as an anti-reflective coating with 'nano texture', with is basically glass etched at a nanometre level for reduced reflectivity and glare. But that's just the icing – more significantly it also takes a whole new approach to HDR.

The Pro Display XDR uses a direct blue (not white) LED backlighting system able to produce 1,000 nits of fullscreen brightness and 1,600 nits peak. Yet the real kicker is that it can sustain 1,000 nits of fullscreen brightness indefinitely, something that's not been possible before on a consumer (okay, well-heeled consumer) product. Regular LCD or OLED HDR screens fade or overheat if you try and hold an HDR

peak for too long. But the Apple XDR thermal system uses a novel aluminium lattice pattern as a heat sink, and it just keeps glowing. And with a claimed 1,000,000:1 contrast ratio, it doesn't just deliver perfect blacks, it handles near black effortlessly too.

Controllers modulate each LED for highly precise local dimming, while a filter turns the blue light white. Another neat thing about this backlight technology is that it also contains blooming, so those halos around brightly lit objects on an LCD panel all but disappear. **The result is an OLED-like performance, which may well be better than OLED.** It seems tailor-made for movies.

At the WWDC unveil, Apple offered a side-by-side comparison with Sony's beloved pro OLED monitor, the BVM-X300, used in movie mastering suites worldwide. Many who saw the comparison gave Apple the edge in image quality.

The prospect of a 4K, or even 8K, TV using this technology is mouth-watering. Apple has long been rumoured to be interested in the TV business, but for the past decade the sector has been a consumer electronics killing field. Yet while TV is a commodity business, where volume inevitably drives down prices, premium OLED sets have maintained price points, which could have piqued Apple's interest.

Scaling all this up from a 32in display to a minimum 50-incher would incur production price rises, but we also know Apple isn't averse to pushing the envelope when it comes to price points, and with the XDR display monitor it shows that it has innovations to tempt AV fans. There's no reason yet to believe Apple will bite the bullet and launch a consumer telly, but for the first time, the prospect is intriguing ■

OLED or LCD? What's the best display tech for home cinema? Let us know: email letters@homecinemachoice.com

Steve May
first heard rumours that Apple would launch a consumer TV when dinosaurs ruled the earth and Adam Sandler films were funny

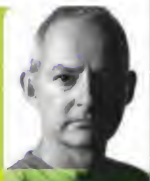


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